




**2010
Montana
Maternal and
Child Health
Needs Assessment**



July 2010
Family and Community Health Bureau
Public Health and Safety Division
Department of Public Health and Human Services

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Process for Conducting the Needs Assessment

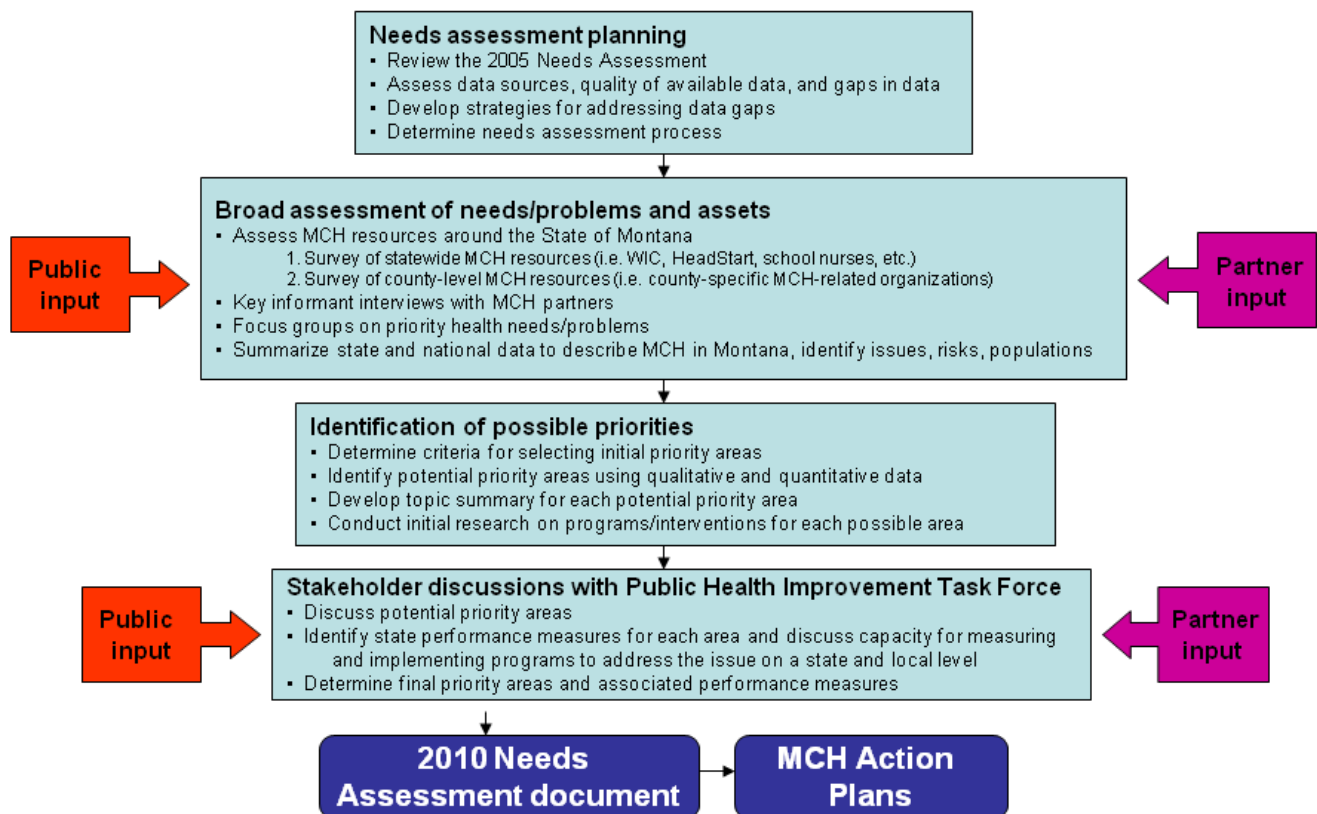
2010
Montana
MCH
Needs Assessment

GOALS AND VISION

The goal of the 2010 Montana Maternal and Child Health (MCH) Needs Assessment was to identify priority areas and performance measures that were relevant to state and local MCH partners. The vision for the document itself was to be an informative, useful, and user-friendly source of information on MCH issues in Montana for local and state partners. A component of the needs assessment process was asking local partners what MCH data they use, why, and what format would be most useful. A major portion of the needs assessment document is topic summaries on a variety of MCH areas that could be used by the state and partners as stand-alone documents on areas of relevance to MCH in Montana. As a next step, action plans will be developed for each priority area to assist partners in identifying the means of addressing the priorities and affecting the performance measures for their own communities. The performance measures and priority areas will also be used as a guide for the allocation of resources – particularly staff time.

The framework for the needs assessment process is described in the diagram below. The initial process was determined by the Family and Community Health Bureau (FCHB) Needs Assessment Team. The process was then revised in response to changing guidelines regarding public input within the Department of Public Health and Human Services (DPHHS).

2010 Montana MCH Needs Assessment Process



LEADERSHIP

The leadership team, which was responsible for moving the process forward and overall coordination, consisted of:
Jo Ann Dotson, Family and Community Health Bureau Chief and Title V Director
Ann Buss, Maternal and Child Health Coordination Section Supervisor
Dianna Frick, Lead Maternal and Child Health Epidemiologist, Maternal and Child Health Epidemiology Unit Supervisor

Key participants in getting the topic summaries and final document pulled together include:
Dorota Carpenedo, Maternal and Child Health Epidemiologist, Maternal and Child Health Epidemiology Unit
Shannon Koenig, Data Coordinator, Maternal and Child Health Epidemiology Unit
Veronica Newhart, Health Education Specialist, Maternal and Child Health Coordination Section

In addition to those listed above, the FCHB needs assessment planning team included:
Chris Fogelman, Breastfeeding Coordinator and Public Health Nutritionist, Women, Infants, and Children (WIC)/Nutrition Section
Kim Koch, Program Specialist, Women's and Men's Health Section
Helen McCaffrey, Program Specialist, Women's and Men's Health Section
Debra Rapaport, Child Health Consultant and Fetal, Infant, and Child Mortality Review Coordinator, Infant, Child, and Maternal Health Section
Rae Brown, Public Health Home Visiting Coordinator, Infant, Child, and Maternal Health Section
Bobbi Perkins, Injury Prevention Coordinator, EMS and Trauma Systems Section (Chronic Disease Bureau)
Mary Lynn Donnelly, Public Health Nurse Consultant, Children's Special Health Services

Three summer students working with Montana through the Graduate Student Intern Program (GSIP) also participated in portions of the needs assessment by coordinating data collection and providing input on the final product:

Regina Rutledge (2008)
Sara Brandspigel (2009)
Mallory Quigley (2010)

METHODOLOGY

The Family and Community Health Bureau (FCHB) regards the needs assessment process as an ongoing, bureau-wide activity. The needs assessment process will continue to be ongoing due to the interest and involvement of state and local partners – particularly those who contract for Maternal and Child Health Block Grant (MCHBG) funding – in improving MCH in Montana. Action plans and evaluation measures are the next step in the process, and regular discussions will take place regarding the new performance measures and how the changes will affect state and local programs.

The annual MCHBG application/report and MCH needs assessment documents are complementary. The national performance measures, health status indicators, outcome measures, and health systems capacity indicators in the MCHBG report were all considered as possible priority areas, and trend data from reporting these measures in past years were used to identify Montana's progress in various areas.

With each annual block grant submission, a small-scale needs assessment takes place. Every year, for each of the block grant measures, the data are collected, the program narratives are written, and discussions take place regarding the usefulness and relevance of the measures, changes in the indicators, possible upcoming events, and other factors that could affect the measure and the targets for subsequent years. The five year needs assessment is an opportunity to explore the topics included in block grant measures in greater depth and identify additional areas of interest to the state.

To continue to build on the 2005 Needs Assessment, an existing Bureau team with membership from all programs in the Bureau was expanded and became the Needs Assessment Team. The Needs Assessment Team developed a process for the 2010 needs assessment, building on the results and lessons learned in 2005. In the summer of 2008, a statewide preliminary planning survey was conducted with MCH partners to solicit feedback regarding previous methodologies, data gaps, and representation. This survey resulted in an initial list of priority needs and

recommendations for conducting the needs assessment. As a result, the 2010 needs assessment was designed to include enhanced public input, greater partner involvement at the state and county level, and a systematic approach to identifying problems and possible solutions.

To achieve greater involvement of the public and partners at the state and county levels and a broader perspective on MCH in the state, Montana's needs assessment process included surveys of public health professionals, focus groups with priority populations, and interviews with key informants with experience in MCH around the state. The input from these sources provides an overall picture of the public and professional perspectives on MCH issues in Montana.

A survey of local organizations working in MCH was conducted to assess resources for the MCH population in the state. The survey also collected information about data capacity and ways to improve data usage at the local level. The results of this survey provided a more complete picture of organizations serving the MCH population in Montana, and were also used to revise the format of the needs assessment to make it more useful and relevant to partners throughout the state. A summary of the local organization survey is included in the "Strengths and Needs of the MCH Population Groups and Desired Outcomes" section.

The focus group populations were determined based on a review of data sources available for the needs assessment. Populations with the least data available to use in assessing their needs (such as adolescents and parents of children with special health care needs (CSHCN)) were identified as priorities for focus groups. The focus group results provide more in depth and specific information on the participants' experiences with MCH issues in Montana than can be gathered from data sources. The focus group results are incorporated into the topic summaries in the "Strengths and Needs of the MCH Population Groups and Desired Outcomes" section. The complete focus group reports are available at: <http://www.dphhs.mt.gov/PHSD/family-health/mchc/phsd-mch-assessment.shtml>.

Key informants from various MCH-related programs and services were identified and interviewed. The interviews explored major health issues, program coverage of the major health issues, and barriers for women of childbearing age (15-44), infants, children, young adults, and special populations. A summary of the key informant interviews can be found at in the "Strengths and Needs of the MCH Population Groups and Desired Outcomes" section.

Available data sources related to maternal and child health in Montana were reviewed throughout the process. Data were used to identify focus groups and potential priority areas and to provide all participants with perspective on the overall status of maternal and child health in Montana. Topic summaries were developed to make the data available in a useful and accessible format. The intent is to use these summaries throughout the next five years, and update and refine them as needed. In the summaries, data are compared to national data, regional data, or previous years of state data to assess the severity and importance of MCH issues in the state. The summaries are intended to be stand alone documents on each topic. They were developed as such based in part from input from local partners on how best to make MCH data available and useful.

Since the needs assessment process is ongoing, subsequent to identifying the priority areas and performance measures, Montana will be developing "action plans" for each of the priority areas. Montana's action plan development will proceed as a cooperative activity between the state and local contractors. The MCH contracting process requires that local contractors complete a "pre-contract survey" in the spring of each year, indicating the state or federal performance measure that local efforts will focus on during the contract period. Local contractors are also required to describe evidenced based activities they will employ to address the selected measure. In FFY 2010, local contractors are being asked to provide their selected activities as short, open ended answers on the surveys – state staff will compile and categorize those responses by level of the pyramid in anticipation of the FFY 2011 pre-contract survey. State staff will research all proposed activities adding locally developed activities with sound scientific evidence to a list of activities being prepared at the state level. This participatory process allows locals to contribute to the development of action plans for performance measures.

METHODS FOR ASSESSING THREE MCH POPULATIONS

All of the qualitative data collected included questions specific to each of the three population groups. At the start of the needs assessment process, all known data sources available on MCH populations were listed, and the

populations with the least amount of data were identified. The three population groups with the least information available were: 1) young children/parents of young children (including questions on pregnancy and childbearing); 2) adolescents, and; 3) children with special health care needs/families of children with special health care needs. Focus groups were conducted with each of these populations throughout the state to fill in some of the gaps in information.

Throughout the process, the leadership team and other involved partners considered whether the topic areas and possible priority areas considered all three MCH populations. The list of potential priority areas includes multiple topics for each population and the final list of priority areas and performance measures includes at least one for each MCH population.

METHODS FOR ASSESSING STATE CAPACITY

In the stakeholder surveys and key informant interviews, partners were asked about their own and other organizations' capacity to address the identified needs. Progress on previous national and state performance measures was considered, as was the political environment for various topics, staff resources available, and availability of funding. Multiple discussions about the capacity of the state and local partners to address various needs occurred throughout the process. State and local capacity was a topic covered during all of the discussions with the Public Health Improvement Task Force to determine the priority areas and performance measures.

The Public Health System Improvement (PHSI) Task Force was responsible for the final identification of the MCH priority areas and performance measures. PHSI Task Force membership includes representatives of local health departments (one each from large, medium, small, and frontier-sized counties), and representatives from a variety of agencies or associations throughout the state, including the Montana University System, tribal health departments, local boards of health, the Montana Primary Care Association, and the Billings Area Indian Health Service.

DATA SOURCES

Data sources used throughout the needs assessment process are referenced within each topic summary or section of the document. The majority of sources have well documented limitations. In most cases, program-specific data were not used unless they were population-based.

In 2008, Montana adopted the 2003 Revision to the US Standard Certificate of Live Birth. As a result of the change, some new data were only available for 2008, and some older data were not comparable from 2008 to previous years. The reasons for varying years are noted where applicable. The source for non-comparable data items is: Births: Final Data for 2006 (www.cdc.gov/nchs/data/nvsr/nvsr57/nvsr57_07.pdf).

Data sources used for the needs assessment include:

- Behavioral Risk Factor Surveillance System (BRFSS)
- Fetal, Infant, and Child Mortality Review data
- Montana Adult Tobacco Survey
- Montana Department of Labor and Industry
- Montana Medicaid and S-CHIP programs
- Montana Office of Public Instruction
- Montana Office of Vital Statistics (Birth and death data)
- Montana oral health screenings of 3rd graders, 2005-2006 School Year
- Montana Prevention Needs Assessment
- Montana Primary Care Office and Health Professional Shortage Area designations
- Montana Public Health Home Visiting Program
- National Center for Health Statistics (Birth and death data via VitalStats and WONDER)
- National Immunization Survey
- National Survey of Children with Special Health Care Needs (NSCSHCN)
- National Survey of Children's Health (NSCH)
- Newborn hearing and blood spot screening results
- Pregnancy Risk Assessment Monitoring System (PRAMS) (via CPONDER)
- Title V Information System (TVIS)
- U.S. Census Bureau: Population and economic data
- WIC (including via PEDNSS and PNSS)
- Women's and Men's Health Section data (Title X/Family Planning)
- Youth Risk Behavior Survey (YRBS)

LINKAGES BETWEEN ASSESSMENT, CAPACITY, AND PRIORITIES

Capacity was a component taken into consideration when the initial list of possible priority areas was identified, as well as when the final priority areas were determined. The information on capacity collected from interviews, surveys, and focus groups during the assessment was used to inform the selection of priority areas. Multiple discussions about the capacity of the state and local partners to address various needs occurred. The final priority areas selected were those where there was an identified need and the capacity to address the need. Discussions on the relationship between capacity and priorities included consideration of whether the priority was applicable at a state or local level, or both, and the capacity of the relevant levels to address the issue. In some cases, the priority areas and performance measures were revised to make them more realistic for local partners.

DISSEMINATION

The entire needs assessment will be posted on the Family and Community Health Bureau website (<http://www.dphhs.mt.gov/PHSD/family-health/FCHB-index.shtml>), and all partners contacted during the needs assessment process who indicated an interest in the document will be notified via email or the communication method of their choice.

The topic summaries are intended to be stand alone documents. They will be posted on the FCHB website as individual documents to be used as informative summaries on the topic areas, and will also be the basis for action plans, for more in-depth analyses, and additional publications. Partners and programs who were involved in developing and reviewing of these documents will be informed when they are final and can use them for their own activities. Several partners have already requested that they be able to provide a link to the summaries from their own websites.

STRENGTHS AND WEAKNESSES OF PROCESS

Several components of the original needs assessment plan were altered during the process. The planning team had intended to conduct a public input survey distributed at public venues like fairs and farmers' markets to gain broad participation from around the state and to determine community priorities and awareness of MCH issues. The survey was not approved for distribution and is not included in the needs assessment. The planning team had also intended to hold two stakeholder meetings to prioritize problems and employ the "problem mapping" technique to identify potential approaches to addressing the priority health issues. Due to changes in DPHHS guidelines regarding public input, the stakeholder meetings did not occur. Instead, the leadership team worked with the Public Health System Improvement (PHSI) Task Force to identify priority areas and performance measures. The shift in the methodology towards the end of the process was a challenge for all who worked on the needs assessment. However, there were more opportunities for discussion of priority areas and performance measures with representatives of local health departments, and possibly increased engagement with the priorities by local partners as a result.

Despite the changes to the needs assessment methodology during the process, the needs assessment resulted in priority areas and state performance measures that were selected and endorsed by local partners. Also, the data analysis will provide more in-depth summaries of MCH topics relevant to state partners than have previously been available.

Partnership Building and Collaboration Efforts

A green triangle with a white border containing the text "2010 Montana MCH Needs Assessment".

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PARTNERSHIPS

Montana's huge landmass houses a population of less than 1 million people, resulting in some residents likening the state to "one big small town." The relatively small population engenders familiarity, especially among individuals and organizations with similar or complimentary goals and missions. The Family and Community Health Bureau (FCHB) staff is one of many entities engaged in cooperative efforts involving state and community level partners to address the health and welfare of mothers, infants, children, youth and their families.

Relationships with some key MCH partners are facilitated by the structure of the health department. Children's Special Health Services (CSHS – the CSHCN program), WIC, Public Health Home Visiting (home visiting for high risk pregnant women and infants), the Primary Care Office, and Family Planning, which includes teen pregnancy prevention, are all a part of the FCHB.

Formal partnerships include contractual agreements between state and local partners to deliver MCH, WIC, Family Planning, and a variety of consultative and clinical services for children and their families. The FCHB, the Title V Agency, manages over 350 contracts with state and local providers at any given time. Contractual partners include 54 of the 56 county health departments and all seven tribal health departments. The Bureau also has contracts with the Area Health Education Center (Primary Care Services), local food vendors (WIC), non-profit organizations (WIC and Family Planning), media agencies, informational technology companies, hospitals, clinics, individual health professionals, and others for services required to implement specific projects.

Bureau staff members serve on various committees and boards, offering advice, input, and consultation to partner organizations. Bureau staff are members of the Montana Public Health Association, the Montana Nurses Association, the Montana Food Security Council, the Montana Kids Count Advisory Council, and serve as committee and/or board members on the Program Services Committee of the Big Sky Chapter of the March of Dimes, the Montana Rural Health Advisory Board, the Montana Healthcare Workforce Advisory Committee, the Montana Teen Pregnancy Prevention Coalition, the Family Support Services Advisory Council, the Traumatic Brain Injury Advisory Committee, the Montana Medical Home Stakeholders Group, and the Montana Transition Training, Information and Resource Center Advisory Board, and the Montana Council for Developmental Disabilities.

Bureau staff are also members and/or committee members of the Association of Women's Health, Obstetric and Neonatal Nurses, the Association of Maternal and Child Health Programs, the Association of State and Territorial Directors of Nursing, the Association of State and Territorial Dental Directors, the American Nurses Association, the National Association of WIC Agencies, and the National Family Planning and Reproductive Health Association.

Staff members are also invited to present and participate in organizations impacting maternal child health policy, including the Montana Council for Maternal Child Health and the Legislative Interim Committee for Children, Families, Health and Human Services.

These and many other committees and groups afford Bureau staff the opportunity to provide input regarding health policy development impacting the MCH target population in Montana. The Bureau management team (consisting of the Bureau Chief, section managers, and lead MCH epidemiologist) participate in weekly Public Health and Safety Division management meetings and represent the Bureau at Public Health System Improvement Task Force and Association of Montana Public Health Officials meetings.

A formal memorandum of agreement exists between the state WIC agency, contained within the Bureau, and the Immunization Program, which is part of the Communicable Disease Prevention and Health Promotion Bureau within the Public Health and Safety Division.

Stakeholder input is assured through a variety of methods, including routine teleconferences open to all WIC agencies, monthly teleconference meetings of family planning directors, annual bureau wide meetings (the Spring Public Health Conference) involving all bureau contractors, contract specific work groups (including the WIC Futures Study Group, the Children's Special Health Services Committee, and the Public Health Home Visiting

Reassessment Task Force) and site visits to individual sites and programs. The 36 Bureau staff members are well known to local MCH staff, who are accustomed to communicating via phone and e-mail on programmatic and policy questions with state staff. The Bureau enjoys a stable workforce, with many staff having 20+ years of experience in state government.

INVOLVEMENT OF PARTNERS IN NEEDS ASSESSMENT

Over the past several years, the Bureau solicited input on the needs of the MCH population, resources, gaps in services and resources, and capacity through surveys of local partners and programs providing MCH-related services, focus groups, and key informant interviews. The Public Health System Improvement (PHSI) Task Force was responsible for the final identification of the MCH priority areas and performance measures. PHSI Task Force membership includes representatives of local health departments (one each from large, medium, small, and frontier-sized counties), and representatives from a variety of agencies or associations throughout the state, including the Montana University System, tribal health departments, local boards of health, the Montana Primary Care Association, and the Billings Area Indian Health Service.

The stated purpose of the PHSI Task Force is to:

- Assess Montana's progress in implementing the goals and objectives of the *Strategic Plan for Public Health System Improvement* and other system improvement efforts;
- Assure the implementation of the *Strategic Plan* with updated "action plans";
- Provide policy development recommendations to state and local agencies regarding public health system improvement issues; and
- Advocate for statewide public health system improvement efforts.

Source: (PHSITF Charter retrieved 6/7/2010 at <http://www.dphhs.mt.gov/PHSD/phsi/pdf/2009-PHSI-TaskForceCharter.pdf>)

Bureau staff met with the executive committee of the task force beginning in February 2010. At meetings in February, March and April, Bureau staff presented findings from the key informant interviews, focus groups, pre-contract surveys, year-end county reports, and numerous other data sources compiled as "topic summaries," included in the "Strengths and Needs of the MCH Population Groups and Desired Outcomes" section. Priority areas and performance measures were discussed and revised during meetings and teleconferences. In April of 2010, Bureau staff, in partnership with the PHSI TF executive committee members, developed a draft list of proposed priority areas and performance measures, which were in turn presented by the task force members to county "caucuses," composed of like sized communities, including frontier, small, medium and large caucus groups. Caucus recommendations were presented by the task force members and further discussed at a meeting on May 13th. The outcome of that meeting was a list of priority areas and performance measures that were recommended to the entire task force by the executive committee and Bureau staff. The list was further discussed and ratified by the full Task Force at a teleconference held on May 26, 2010.

Strengths and Needs of the MCH Population Groups and Desired Outcomes



The strengths and needs of the MCH populations in Montana are described in the following topic summaries. The topic summaries cover both the final priority areas and some possible priority areas, as well as several topic areas essential to MCH. Both qualitative and quantitative data are included when relevant and available. Instead of considering these independently, throughout Montana's needs assessment process quantitative and qualitative data sources were used cooperatively to provide a more complete perspective on the various topics.

Based on multiple conversations during the needs assessment process, the needs assessment team decided to consider CSHCN included in all topic summaries on children. Issues that affect children without special health needs are also a concern for those with chronic health conditions, and potentially even more so. One topic summary focuses exclusively on CSHCN, and several others include data specifically on CSHCN if it is available.

The beginning of the section summarizes the public input components of the needs assessment. These elements were the foundation for identifying emerging needs, partner priorities around the state, and gaps in services or capacity to address needs. The stakeholder survey, partner organization survey, and key informant interviews are each summarized separately. Another important part of the public input into the needs assessment was focus groups. The focus group results are included in the topic summaries where applicable, and longer reports from each focus group can be found on the Family and Community Health Bureau website at: <http://www.dphhs.mt.gov/PHSD/family-health/mchc/phsd-mch-assessment.shtml>.

Following the public input summaries are overviews of Montana demographics, family and community environments, services available for women and children in the state, and some broad MCH topics, such as low birth weight and mental health. These pieces provide the background on Montana to assist in interpreting the data on needs and risks presented in the subsequent topic summaries. They describe elements of the state environment that can affect the health of all of the MCH population groups.

Also used in the broad assessment of strengths and needs were trend charts of the MCH Block Grant performance and outcome measures (Attachment A) and recent reports or presentations on topics such as child mortality, teen pregnancy and birth, and others not included in the topic summaries below. Topics with already-existing recent reports were not duplicated for this needs assessment unless they were identified as priority areas during the assessment process. Links to the reports used are provided below.

- Fetal, Infant, and Child Mortality Review: <http://www.dphhs.mt.gov/PHSD/family-health/ficmr/ficmr-index.shtml> (A summary of mortality reviews conducted in 2005 and 2006 – May 2009).
- Teen Pregnancy and Birth: <http://www.dphhs.mt.gov/PHSD/Women-Health/teenpreg-index.shtml> ("Trends in Teen Pregnancies and Their Outcomes in Montana, 1991-2005" and "Teen Pregnancy Rate in Montana – County Data").

Section C includes several specific topics that were considered as possible priority areas and Section D includes all of the final priority areas. For more detail on how the potential and final priority areas were selected, please see the "Selection of State Priority Needs" section.

The results of the qualitative and quantitative data analyses, in terms of identifying priorities in the state and determining what areas to focus on strengthening, are discussed in more detail in the "Selection of State Priority Needs" section.

Content:

- a. Public Input
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 - ii. Partner Organization Survey
 - iii. Key Informant Interviews
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 - i. Demographics

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 - iii. Immunization
 - iv. Oral Health
 - v. Preconception Health
 - vi. Smoking during Pregnancy

MCH Stakeholder Survey

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OVERVIEW

In 2008, the Family and Community Health Bureau (FCHB) conducted a statewide web-based stakeholder survey. The survey collected qualitative information on the most common, new, and emerging needs of the MCH population as well as the most and least effective methods for data collection. The survey results were intended to be used for planning the needs assessment methods and developing an initial list of needs for each population group.

SURVEY GOALS

1. To identify effective and efficient data collection methods within MCH population.
2. To determine current needs among MCH population.
3. To describe new and emerging needs among MCH population.

RECOMMENDED DATA COLLECTION METHODS

Overall, an online survey was considered to be the most effective means of collecting data, followed by key informant interviews and focus groups. Community meetings and paper surveys were considered the least effective methods.

Geographic differences were present in the recommended data collection methods. Listed below are the most effective and least effective data collection methods according to survey respondent locations:

METROPOLITAN/MICROPOLITAN

Most effective: 1) Online survey, 2) Focus groups

Least effective: 1) Paper survey, 2) Community meetings

NON METROPOLITAN/MICROPOLITAN

Most effective: 1) Online survey, 2) Paper survey

Least effective: 1) Paper survey, 2) Community meetings

RESERVATION

Most effective: 1) Key informant interviews, 2) Paper survey

Least effective: 1) Online surveys, 2) Community meetings

STATEWIDE

Most effective: 1) Online survey, 2) Focus groups

Least effective: 1) Paper survey, 2) Community meetings

The greatest barriers to data collection were:

- time required of staff, and
- getting clients to participate.

MONTANA QUICK STATS

226 Surveys distributed

48% Surveys returned

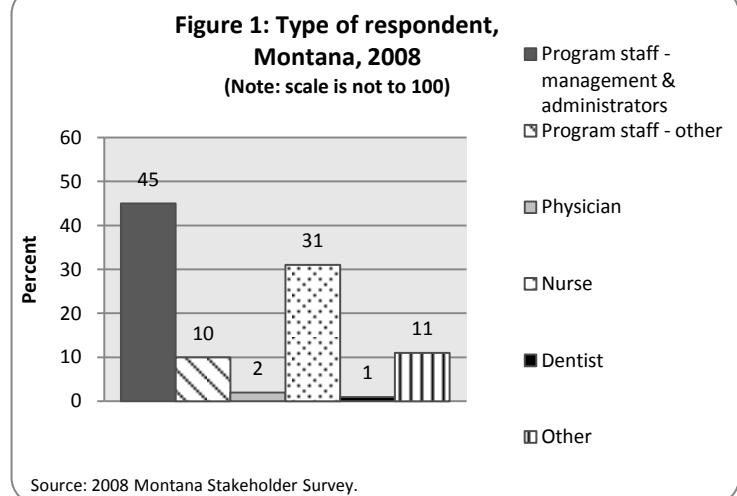
GEOGRAPHIC DISTRIBUTION OF SURVEY RESPONDENTS

39% Non metropolitan/micropolitan

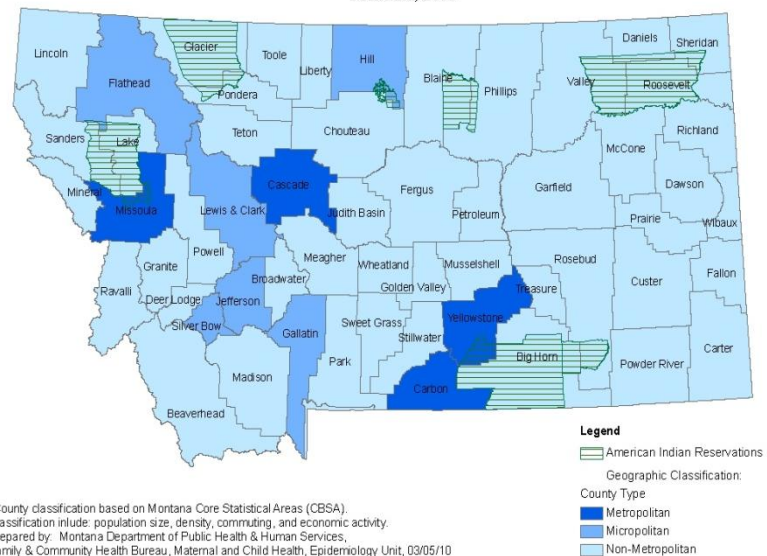
19% Metropolitan

16% Micropolitan

4% Reservations



Map 1: Stakeholder Survey Participants, Montana, 2008



MCH Stakeholder Survey

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MCH POPULATION NEEDS

The survey participants were asked questions about the greatest health needs, unmet health needs, and new and emerging health needs for each of the five population groups; women of childbearing age, infants, children, adolescents, and children with special health care needs (CSHCN). The table lists the top five of the most common identified health needs, five unmet health needs, and five new and emerging health needs for each population group.

Table 1: Five most common identified health needs, unmet health needs, and new and emerging health needs of MCH populations, Stakeholder Survey, Montana, 2008

Health needs	Women of childbearing age (15-44 yrs)			Infants (0-1 yr)			Children (1-10 yrs)			Adolescents (11-19 yrs)			CSHCN		
	Most common health need	Most common unmet health need	Identified as new and emerging health need	Most common health need	Most common unmet health need	Identified as new and emerging health need	Most common health need	Most common unmet health need	Identified as new and emerging health need	Most common health need	Most common unmet health need	Identified as new and emerging health need	Most common health need	Most common unmet health need	Identified as new and emerging health need
Alcohol, tobacco, and drug prevention		100%								10%	82%	X			
Birth control, family planning	7%		X								82%				
Breastfeeding				8%	81%	X									
Child care				7%	85%	X									
Coordination of care															
Exercise/physical activity								94%			94%				
Family support services													9%		X
Financial assistance														83%	
Health insurance	7%	96%	X		100%		7%		X			X		90%	
Immunization				9%		X									
Meeting developmental markers															
Mental health		100%						100%		9%	100%	X	8%		X
Nutrition	9%		X	10%		X	13%		X	7%				100%	
Obesity prevention							6%	87%	X						
Oral health	10%	95%	X		87%		17%	84%	X	11%	84%	X	11%		X
Parental relationship					94%										
Parenting education															
Prenatal care		100%													
Primary health care	14%		X	18%		X	10%		X				9%	81%	X
Reproductive health services															
Sexual health education										8%	82%	X			
Safe home environment								87%							
Specialty health care services													12%	95%	X
STD/STI education/prevention															
Women's health services															

Source: 2008 Montana Stakeholder Survey.

MCH Partner Organizations Survey

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OVERVIEW

It is essential to understand the availability of maternal and child health (MCH) information, and how it can be utilized for public health activities directed toward improving the health of women and children. In 2009, the Family and Community Health Bureau (FCHB) conducted a statewide web-based survey targeting local organizations serving Montana women and children. The survey was distributed to MCH partners who do not contract for MCHBG funds.

SURVEY GOALS

1. To describe MCH related organizations and services throughout the state.
2. To identify how MCH data and reports, including the MCH needs assessment are used.
3. To identify ways MCH data could be more accessible and useful to partner organizations.

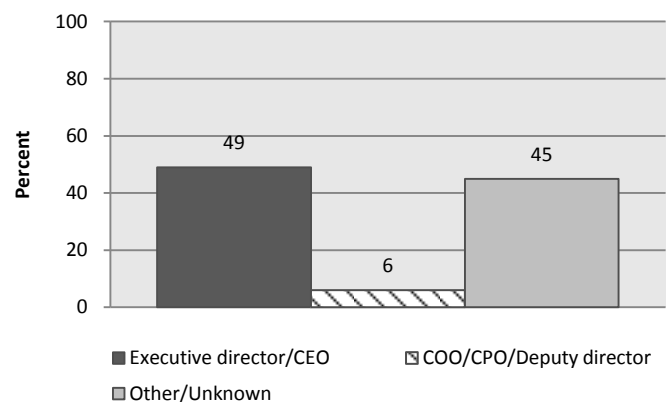
FINDINGS

- **ACCESSING INFORMATION:** The majority (95%) of the respondents said they use data or statistics about women and children in the state, county, or city.
- **USE OF DATA:** Out of the survey participants who use data or statistics, the most common reasons for accessing information were:
 - Preparing grant proposals or reports (96%)
 - Planning programs (63%)
 - Monitoring and evaluation of existing programs (61%)
 - Preparing marketing or communication materials (50%)
 - General interest (24%).
- **DATA FORMATS:** Survey participants were asked about the best format for a report on MCH needs. The respondents said that most likely, they would read the report if it was searchable online, where the type of information can be chosen (50%) or a full report received by email (39%). Only a few respondents listed the best formats as full report posted on the website (7%) or a printed report received by mail (4%).

MONTANA QUICK STATS

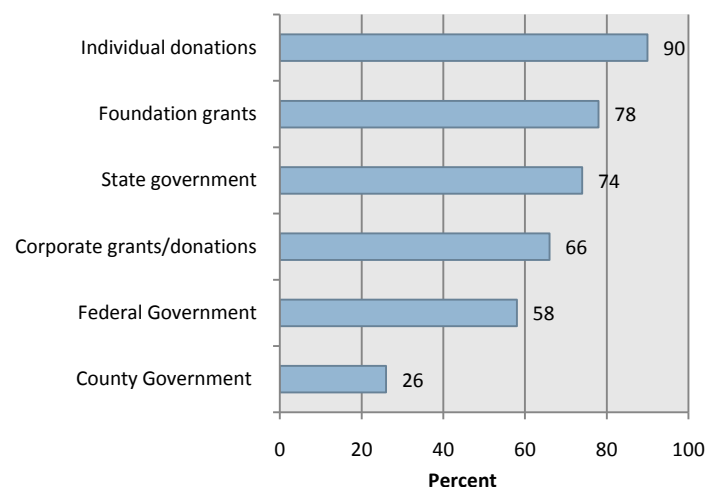
115 Surveys distributed
48% Surveys returned

Figure 1: Type of respondent, Montana, 2009



Source: 2009 Montana Organizations Survey.

Figure 2: Organizations serving women and children, by type of funding sources, Montana, 2009



Source: 2009 Montana Organizations Survey.

MCH Partner Organizations Survey

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PAST EXPERIENCES WITH DATA USAGE – MCH NEEDS ASSESSMENT

To ascertain how best to format the 2010 MCH needs assessment, the survey participants were asked questions about their familiarity with the 2005 MCH needs assessment.

“Have you read the Montana Maternal and Child Health Needs Assessment published in 2005?”

- Read all or most of it (8%)
- Read parts of it (32%)
- Did not remember (16%)
- Did not read (44%).

“Why not?”

- Did not know about it (80%)
- Could not easily find the needed information (8%)
- The information was not relevant (12%).

RECOMMENDATIONS ON DATA USAGE – MCH NEEDS ASSESSMENT

Survey participants listed several recommendations to improve data accessibility for the MCH needs assessment.

1. Focus on web-based dissemination.
2. Ensure that it is easy to find specific topics.
3. Incorporate design principles to make information more accessible.
4. Include personal quotes and stories.
5. Maximize the impact of the needs assessment beyond the FCHB to ensure stakeholders know how it can help them.
6. Organize teleconference as part of the roll-out.
7. Track the effectiveness and accessibility of the needs assessment.

Table 1: Most commonly used data sources, by organization type, Montana, 2009

Organization Type	Most Commonly Used Data Sources
Child abuse prevention	US Census, Kids Count, Children’s Bureau Child Abuse and Neglect Statistics
Child care	US Census, Kids Count, Children’s Defense Fund, DPHHS, National Child Care Information Center
Crisis hotline	Not available
Disabilities	US Census, Kids Count, Organization’s Internally Collected Data, Other
Economic assistance	State of Montana Data
Food and nutrition	US Census, School District Data from OPI, TANF
Literacy	US Census, Other
Medical clinic	Kids Count, Vital Statistics
Mental health	US Census, Kids Count, OPI, Kaiser Foundation, NCHS, SAMHSA, Other
Reproductive health and pregnancy	US Census, Kids Count, MCH, CDC, Vital Statistics, MT DPHHS Teen Pregnancy Report, NCHS
Resource center	US Census, MT Crime Index, Vital Statistics
Substance abuse prevention and treatment	Not available
Violence against women	US Census, Kids Count, PDQ, Vital Statistics, Law Enforcement, Non-profit Poverty Social Service Organizations, National Coalition Against Domestic Violence & Sexual Assault, DPHHS, Organization’s Internally Collected Data
Youth – education and recreation	US Census, Kids Count, YRBS, MT PNA, PDQ, Child Trends, Drug & Alcohol Statistics, Youth Surveys, MT Board of Crime Control, National Center for Kids Count, Girl Scouts USA in New York, Child Welfare League, Abuse Neglect Data, NCHS, Organization’s Internally Collected Data
Youth - legal advocacy	US Census, Kids Count, Child Welfare League of America, Prevent Child Abuse, American Psychological Association, National CASA Association, MT DPHHS, MT Legal Services Data, Organization’s Internally Collected Data
Youth - mentoring and social development	US Census, Kids Count, YRBS, MT Board of Crime Control, SMART System, Needs Assessment Survey

Source: 2009 Montana Organizations Survey.

Key Informant Interviews

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OVERVIEW

Telephone interviews were conducted with 40 "key informants" across the state. Key informants were public health professionals from a variety of programs and types of agencies. Professions represented included program managers/coordinators, directors/executive directors, doctors, dentists, epidemiologists, RNs/nurse consultants, and others.

Interviewee organization/affiliation:

County health departments	12
Nonprofit organization	11
State agency	6
Health care provider	5
Tribal/American Indian organization	4
Parent	1
Insurance providers	1

FIVE TARGET GROUPS COVERED BY QUESTIONS:

- *women of childbearing age (15 through 44 years)*
- *infants from birth to age 1*
- *children 1 through 10 years of age*
- *young adults from 11 to 19 years of age*
- *special populations including children with special health care needs, deaf or hard of hearing, migrant workers, etc.*

TOPICS

Survey questions were open-ended and covered the following topics:

- Major health issues affecting the five target groups
- Who and how these identified health issues were being addressed
- Barriers associated with the identified health issues
- Suggested public health interventions to improve the health of the five target groups

MOST COMMON BARRIERS TO ADDRESSING THE ISSUES

- Women of childbearing age: lack of knowledge/education, lack of community funding and resources, high cost of health care, no transportation.
- Infants: Parents' lack of knowledge/ education/ opportunities to learn, lack of money/low income, celebrity/media opposition to immunizations or link to autism, lack of staff.
- Children: Lack of education, cost, nutrition.
- Young adults: Lack of education, cost/affordability, lack of communication, political, misinformation or lack of accurate information.
- Special populations: Distance to services, money/cost, lack of specialists, access to specialty care, referral issues.

MONTANA QUICK STATS

40 Interviews conducted

Figure 1: Major health issues for women of childbearing age (15 through 44 years)
(number of times mentioned)

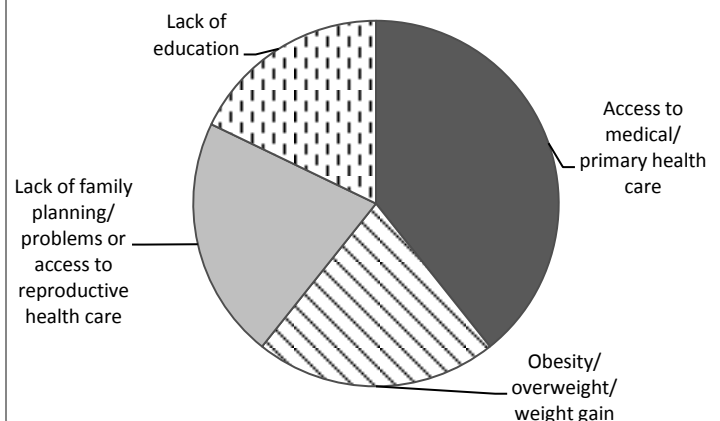
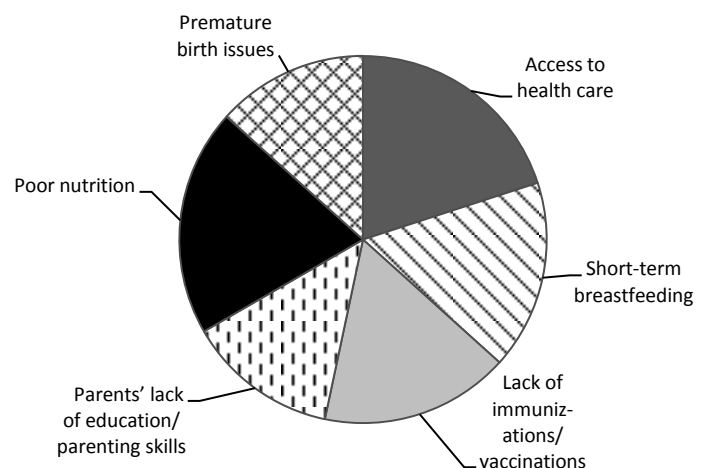


Figure 2: Major health issues for infants (birth to age 1)
(number of times mentioned)



Key Informant Interviews

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SUGGESTED PUBLIC HEALTH INTERVENTIONS TO IMPROVE THE HEALTH OF THE FIVE TARGET GROUPS:

WOMEN OF CHILDBEARING AGE: education surrounding nutrition, women's health issues, sexual health, and prevention

"More awareness of women's health issues by education I feel would be the most helpful intervention. I think public health nurses should do this through education. They should put on health fairs continuously and work with the school system to talk about women's health issues, teenage pregnancy, and obesity. I would focus a lot on obesity because it leads to so many health issues, like diabetes. Women could help themselves better if they were more educated on these issues."

INFANTS: breastfeeding

"I would choose breastfeeding because of the cognitive benefits, decrease in cost of formula, and increased attachment between Mother and infant. If everyone would be given a strong solid beginning to be able to breastfeed 6 months and that was supported, it would definitely give the infant a strong start."

CHILDREN: increase the number of providers in rural communities and statewide

"Poverty has a huge effect on this population as well as child abuse and neglect, and healthcare access. Poor access to dental care and other services, such as eye screenings and immunizations, is also prevalent. It is difficult to put food on the table and still pay for housing. We need to make sure all children are ready for school in their healthcare needs. Funding has been stagnant for at least 3 years, making insufficient funding to provide the necessary services."

YOUNG ADULTS: education

"I know that during health screenings they assess alcohol, but it's kind of like the school problem. They look at it, but by the time the kid comes in, he/she has a drinking problem that is pretty severe."

SPECIAL POPULATIONS: one-stop-shopping center to get needed information, advice, referrals, and programs in which special populations may be eligible

"I would choose to have more health screening and early intervention, even from the time of delivery. We should have early education for the parents even before birth so they can be even more prepared and know what to look for..."

"We serve a thousand women, but we don't seem to do much of anything for the other nine thousand women who are pregnant."

Figure 3: Major health issues for children (1 through 10 years of age)
(number of times mentioned)

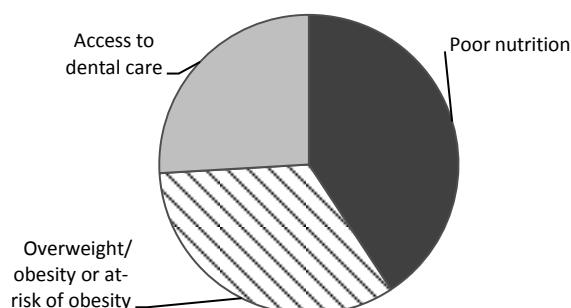


Figure 4: Major health issues for young adults (11 to 19 years of age)
(number of times mentioned)

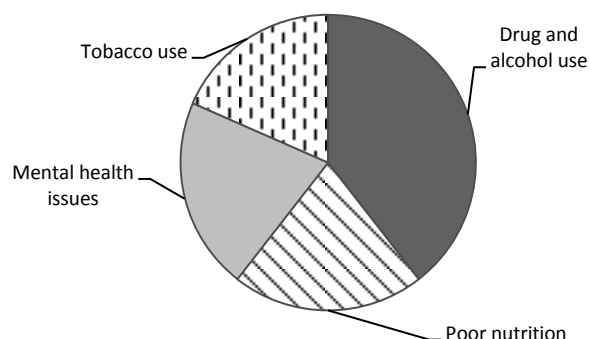
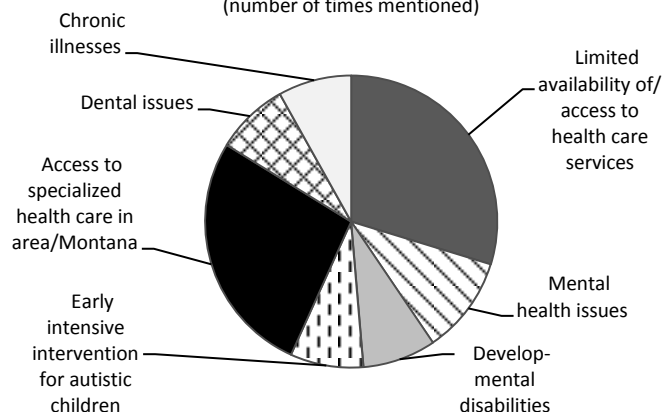


Figure 5: Major health issues for special populations
(number of times mentioned)



Demographics

2010
Montana
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OVERVIEW

Montana ranks fourth among all the states in terms of land area, and 44th in terms of population. Montana is one of only a few states with a population under one million. The state population is projected to reach one million between 2015 and 2020.¹

Between 2000 and 2008, Montana's population increased from 902,190 to 967,440—a 7.2% increase.¹ Nationally, the population change for the same time period was 8.0%.²

Montana's population density increased from 6.2 to 6.6 people per square mile between 2000 and 2008.

Although the population of Montana is growing overall, within the state the population is shifting west and to more urban areas. Montana has three metropolitan areas (a core urban area of 50,000 or more population) and five micropolitan areas (an urban core of 10,000-49,999 people), all but one of which are in the western half of the state. Metro- and micropolitan areas also include adjacent counties that have a high degree of social and economic integration with the county containing the urban core. One of Montana's metropolitan areas includes two counties – Yellowstone and Carbon Counties (Billings area) in south central Montana. The Helena micropolitan area also includes two counties, Lewis & Clark and Jefferson Counties in south western Montana.

Billings is the largest city in Montana and is located in Yellowstone County, in the south central portion of the state. Bozeman and Kalispell are the fastest growing cities in Montana; both had a population increase of over 40 percent between 2000 and 2008.

STATE AND NATIONAL DATA (2008)²

	MT	US
Population under 5 years of age	6%	7%
Population under 18 years of age	23%	24%
White, not Hispanic/Latino	88%	66%
American Indian/Alaska Native	6%	1%
Hispanic or Latino	3%	15%
Median household income	\$43,948	\$52,029
Persons below poverty level	14%	13%

GENDER AND AGE

In 2008, Montana's population was almost evenly split between women and men.¹ Children under the age of 18 made up 23% of the state population, and 6% of the total population was under the age of 5 years.² The median age of the population was 39.3 years.¹

MONTANA QUICK STATS (2008)¹

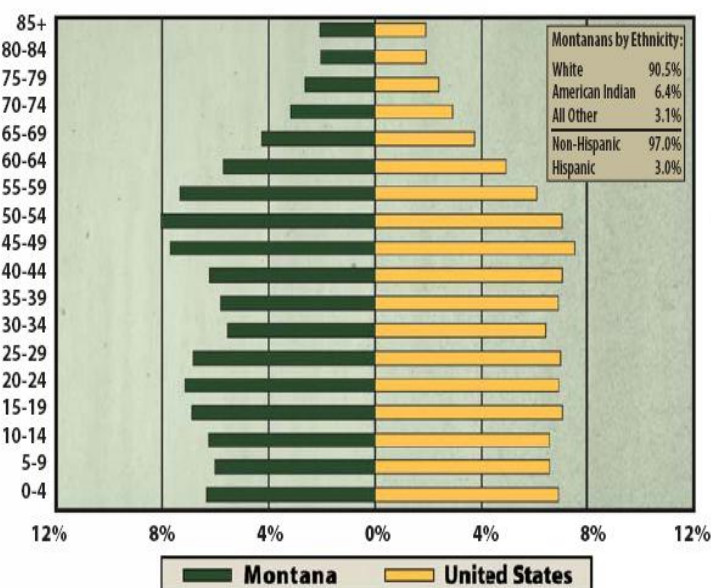
967,440	State population
145,552 mi ²	Land area
20.6%	People under age 18 below poverty
16.1%	People without health insurance

Table 1: Population of Montana's Largest Cities

City	1980	1990	2000	2008
Billings	66,818	81,151	91,777	103,994
Bozeman	21,645	22,660	28,161	39,442
Butte-Silver Bow	37,205	33,336	33,892	32,119
Great Falls	56,884	55,097	57,041	59,251
Helena	23,938	24,569	26,164	29,351
Kalispell	10,689	11,917	15,075	21,182
Missoula	33,351	42,918	57,399	68,202

(1990) US Census Bureau: 1990 CPH-2-1 (web) (in the boundaries of 1990). 2000 (2008) US Census Bureau (web) (in the boundaries of 2008 for cities and towns; in the boundaries of 2000 for unincorporated places).

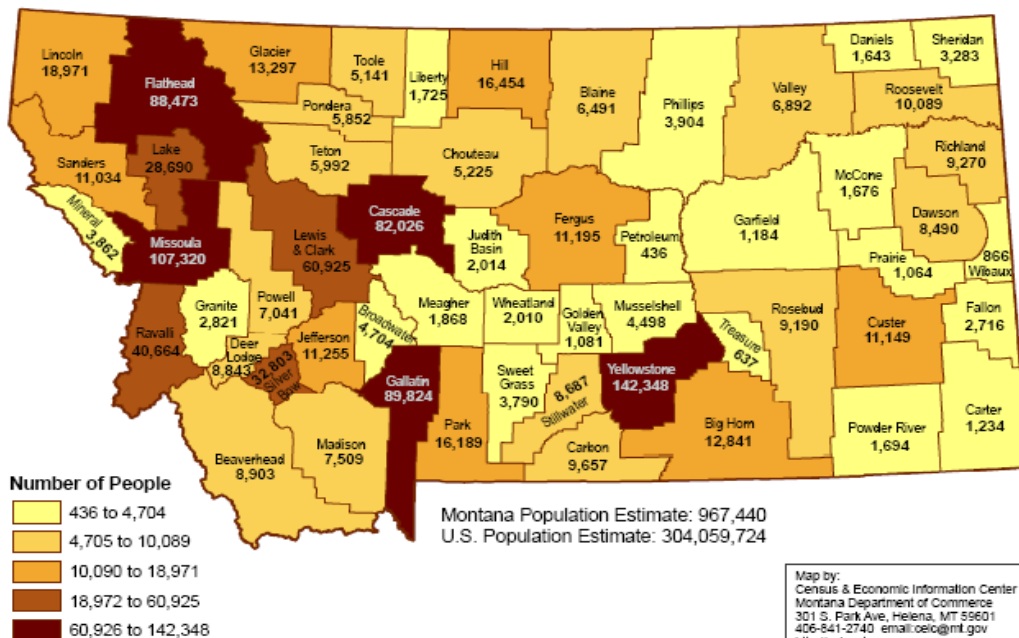
Figure 1: Population distribution by age, Montana and United States, 2008



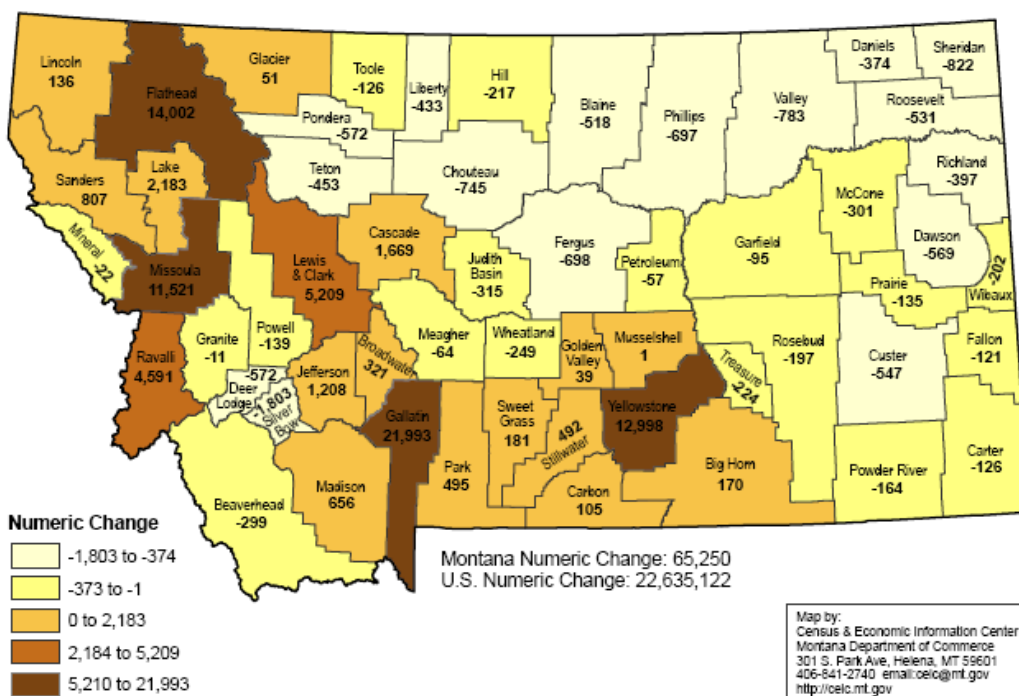
Source: U.S. Census Bureau, 2008 Population Estimates

Demographics

Map 1: Montana County Population Estimates - July 1, 2008



Map 2: Montana County Population Change
Numeric Change Between Census 2000 and 2008 Estimates



Demographics

RACE AND ETHNICITY

In 2008, 91% of Montana's population was white and 6% was American Indian/Alaska Native.¹ Among children 0-18 years of age, American Indians comprise approximately 8% of the state population; 4% of children 0-18 are two or more races. Approximately 6% of Montana women of childbearing age (15-44) are American Indian and 13% of births are to American Indian mothers. Montana has a much higher proportion of American Indian women of childbearing age and children age 0-18 than the US overall and most other states in the country, with the exception of North Dakota, South Dakota, Oklahoma, Alaska, and New Mexico.⁶

Seven reservations are present in Montana. Although there are many tribes represented among the American Indians residing in Montana, the reservations are primarily home to Blackfeet, Crow, Salish, Kootenai, Assiniboiné, Gros Ventre, Sioux, Northern Cheyenne, and Chippewa-Cree.

An estimated 3% of Montana's population is of Hispanic or Latino origin.¹ While the proportion of the Montana population that is Hispanic or Latino is growing, it is much lower than the US overall and most neighboring and regional states, with the exception of North and South Dakota. In 2006-2008, 2.1% of Montana women of childbearing age and 4.5% of children ages 0-18 were Hispanic/Latino.

EDUCATION

In the 2007-2008 school year, white students had an 87% completion rate, while among American Indian students the completion rate was 67%. The completion rate among American Indian students appears to have increased in recent years, in the 2002-2003 school year the completion rate was 61%.⁴

The percent of Montana's population 25 years of age and over with a bachelor's degree or higher is similar to the US rate: 27.1% and 27.4%, respectively, in 2006-2008.

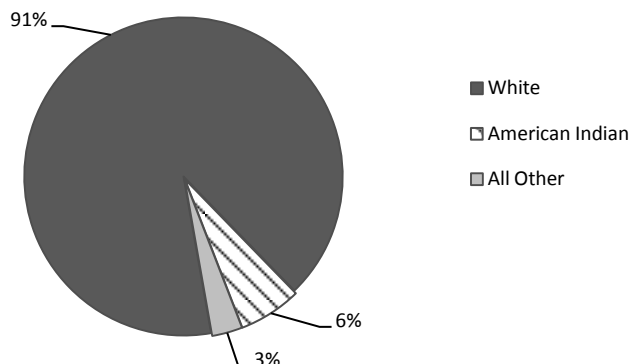
ECONOMY

In 2008, 14.1% of Montana's population was below the federal poverty level and 22.8% of children 0-4 years were in households which fell below the federal poverty level. Among all children less than 18 years of age, 19.2% resided in households below the poverty level.³

In Montana, 8.2% of households received food stamp/SNAP benefits in 2008. This compares with 8.6% nationally and is an increase of 3,943 households from 2007.⁵

Montana's median household income was \$43,948, lower than the US average.² The per capita personal income in Montana was \$34,644; 86% of the national average.

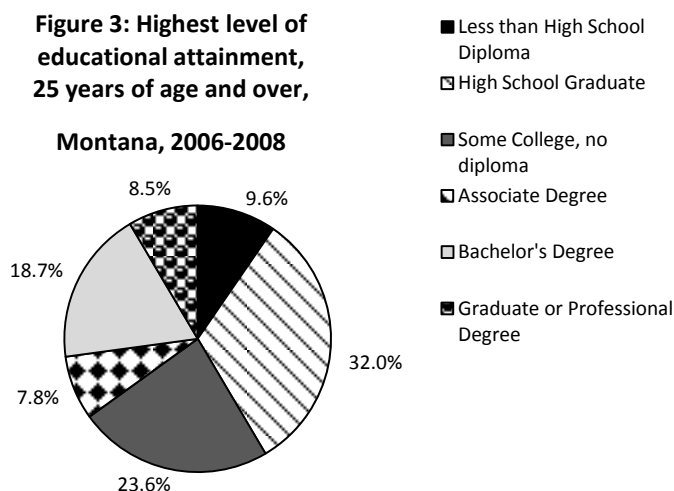
Figure 2: Montana population, by race, 2008



Source: MT Department of Commerce, CEIC, Montana by the Numbers.¹

Figure 3: Highest level of educational attainment, 25 years of age and over,

Montana, 2006-2008



Source: U.S. Census Bureau, American Community Survey 2006-2008.⁷

Sources:

1. Montana Department of Commerce. Census and Economic Information Center. Montana by the Numbers. Available at: <http://www.ceic.mt.gov/MtByNumb.asp>. Accessed March 8, 2010.
2. U.S. Census Bureau. State and County Quick Facts. Available at: <http://quickfacts.census.gov/qfd/states/30000.html>. Accessed March 9, 2010.
3. U.S. Census Bureau. Small Area Income and Poverty Estimates. Available at: <http://www.census.gov/did/www/saie/data/statecounty/data/2008.html>. Accessed March 10, 2010.
4. Montana Office of Public Instruction. Facts about Montana Education, September 2009. Available at: http://opi.mt.gov/pdf/Measurement/EdFacts09_10.pdf. Accessed March 10, 2009.
5. Loveless T. Food Stamp/Supplemental Nutrition Assistance Program (SNAP) Receipt in the Past 12 Months for Households: 2008 American Community Survey. U.S. Department of Commerce. September 2009. Available at: <http://www.census.gov/prod/2009pubs/acsbr08-8.pdf>. Accessed March 10, 2010.
6. U.S. Census Bureau. Current Population Survey (CPS) Table Creator. Available at: http://www.census.gov/hhes/www/cpstc/cps_table_creator.html. Accessed July 1, 2010.
7. U.S. Census Bureau. 2006-2008 American Community Survey. Available at: http://factfinder.census.gov/servlet/STTable?_bm=y&-geo_id=04000US30&-qr_name=ACS_2008_3YR_G00_S1501&-ds_name=ACS_2008_3YR_G00_. Accessed July 1, 2010.

Family and Community Environment

2010
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OVERVIEW

Living in a supportive family and community environment can play an important role in the development of children and youth. Extracurricular and after-school programs may help with children's social/emotional well-being, have a positive impact on academics, and contribute to better health outcomes in the future.

STATE AND NATIONAL DATA (2007)²

	MT	US
Children read to by family member(s):	57%	48%
Children sung to or told stories by family member(s):	68%	59%

FINDINGS

- COMMUNITY AMENITIES:** In 2007, the Montana prevalence of children living in a neighborhood with amenities that include all the following: sidewalks, library, recreation center, and parks, was significantly lower 42% [39.2-44.7] than the national prevalence 48% [47.3-49.0].²
- NEIGHBORHOOD SAFETY:** In 2007, 92% [90.3-93.8] of Montana children living in a neighborhood their parents felt was usually or always safe, significantly higher than the percent of children in the US overall (86% [85.4-86.7]).²
- SCHOOL SAFETY:** In 2007, 94% [91.7-95.8] of Montana children 6-17 years of age attended a school their parents felt was usually or always safe, significantly higher than parents nationally 90% [88.9-90.2].²

Sources:

- Kids Count Data Center, 2008. Available at: <http://datacenter.kidscount.org/data/acrossstates/Default.aspx>. Accessed July 12, 2010.
- Child and Adolescent Health Measurement Initiative. 2007 National Survey of Children's Health. Data Resource Center for Child and Adolescent Health. Available at: <http://nschdata.org/StateProfiles/IndicatorSelection07.aspx>. Accessed April 1, 2010.

MONTANA QUICK STATS (2008)¹

- 29% Children 0-18 years living in single-parent families
- 4% Children 0-18 years living in households where grandparent(s) provide the primary care

Figure 1: Children participating in community activities, by selected activities, Montana and United States, 2007

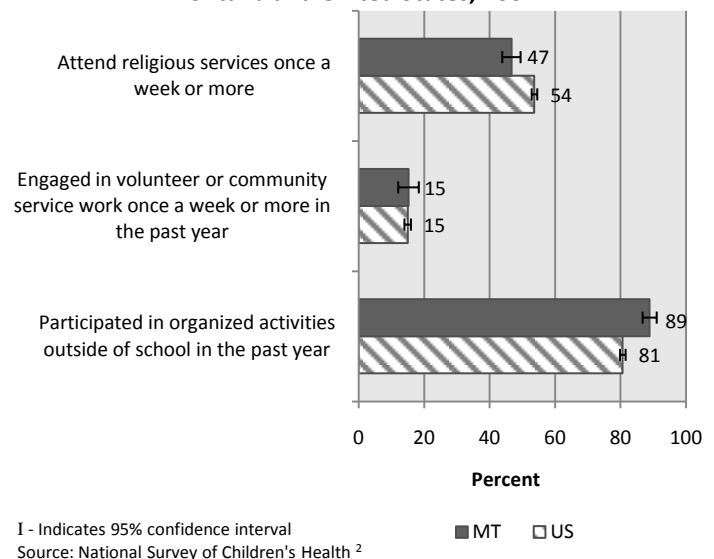
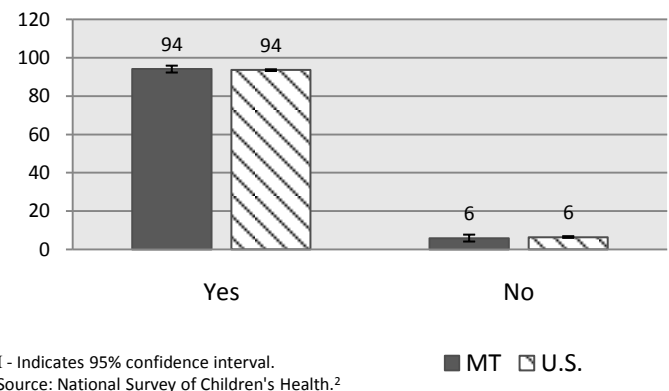


Figure 2: Children age 6-17 years consistently exhibiting positive social skills, Montana and United States, 2007



Services for Women and Children

2010
Montana
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CHILDREN

In 2008, 19% of Montana's children between birth and 19 years of age lived in poverty.¹ The families of these children frequently utilized programs in the state designed to assist in providing necessities such as food, shelter, healthcare, and safe childcare for their children.

PROGRAMS SERVING CHILDREN (2008):

- Temporary Assistance for Needy Families (TANF): 68,346 children ages 0-19 years²
- WIC: 28,466 children ages 0-5 years²
- SNAP (food stamp program): 21,558 children ages 0-19 years²
- Medicaid: 64,489 children ages 0-19 years²
- SCHIP : 22,756 children ages 0-19 years²
- Head Start/Early Head Start: 5,470 children ages 0-5 years³
- Best Beginnings Scholarship Program (childcare assistance): 10,090 children 0-12 years⁴

WOMEN

Twenty percent of women of childbearing age (15-44 years) in Montana lived in poverty in 2008.¹ These women often relied on several programs that serve low income women—especially those that serve pregnant women and mothers of young children.

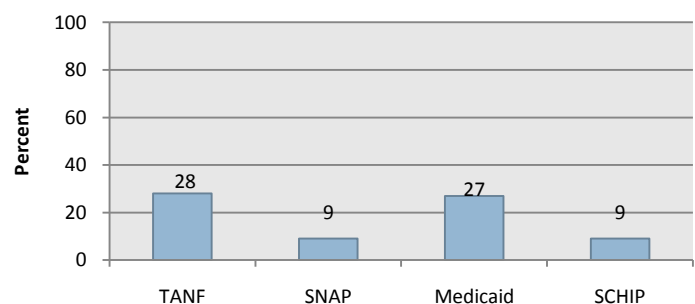
PROGRAMS SERVING WOMEN (2008):

- Family Planning: 25,427 women⁵
- Medicaid: 25,712 women¹
- Public Health Home Visiting (PHHV): 1061 pregnant women⁶ (this number is from PHHV site totals and may not reflect actually state totals)
- WIC: 9982 pregnant women and nursing mothers⁷

MONTANA QUICK STATS (2008)¹

242,716	Number of children age 0-19
45,440	Number of children age 0-19 below the 100% poverty level
104,179	Number of children age 0-19 below the 200% poverty level
183,522	Number of women of childbearing age (15-44)
36,224	Number of women age 15-44 below 100% of the poverty level
72,070	Number of women age 15-44 below 200% of the poverty level

Figure 1: Approximate proportion of population 0-19 participating in programs that serve children, Montana, 2008



Source: Montana DPHHS, Program Contacts.

Sources:

1. U.S. Census Bureau. Current Population Survey (CPS) Table Creator II. Available at: http://www.census.gov/hhes/www/cpssc/apm/cpssc_alt pov.html. Accessed April 26, 2010.
2. U.S. Department of Health and Human Services. Maternal and Child Health Bureau. Title V Information System. Montana 2008 MCH Block Grant Report. Available at: <https://perfdata.hrsa.gov/MCHB/mchreports/Search/program/prgsch04.asp>. Accessed April 28, 2010.
3. Montana Kids Count. Available at: <http://www.montanakidscount.org/Portals/6/2009%20state%20data%20book/Kids%20count%2009%20-%20low%20res.pdf>. Accessed April 28, 2010.
4. State of Montana Dept of Public Health and Human Services. December 2008 Montana Early Childhood Data Report. Available at: <http://www.dphhs.mt.gov/hcsd/childcare/documents/0708datareport.pdf>. Accessed May 3, 2010.
5. Fowler, CI, Gable, J, Wang, J, and Lyda-McDonald, B. (November 2009). Family Planning Annual Report: 2008 National Summary. Research Triangle Park, NC: RTI International. Available at: http://www.hhs.gov/opa/familyplanning/toolsdocs/fpar_2008_natl_summ.pdf. Accessed June 1, 2010.
6. Montana Department of Public Health and Human Services, Family and Community Health Bureau, Public Health Home Visiting Program.
7. Montana Department of Public Health and Human Services, Family and Community Health Bureau, Montana WIC Program.

Births Overview

2010
Montana
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Needs Assessment

OVERVIEW

Live birth records are an important source of data on the health of the Montana population. They provide information about risk factors and health outcomes that can be used to plan prevention activities and assist programs to prepare for changes in the number and demographics of the people they serve.

STATE AND NATIONAL DATA (2006)²

	MT	US
Crude birth rate (per 1,000 population)	13.2	14.2
Fertility rate (per 1,000 women 15-44 year of age)	69.5	68.5
Births to white mothers	86%	78%
Births to American Indian/Alaska Native mothers	13%	1%
Births to unmarried women	36%	39%
Twins (per 1,000 births)	29.0	32.2

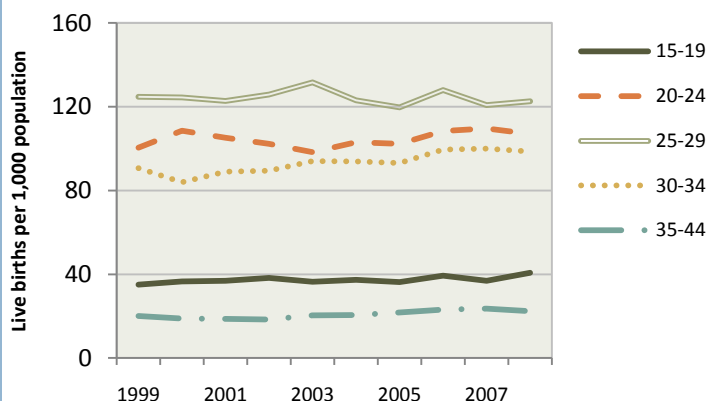
DEMOGRAPHICS

- TREND:** The number of births to Montana residents increased 17% between 1999 and 2008, from 10,779 to 12,595. The crude birth rate and general fertility rate also increased during that time.¹
- AGE:** The majority of births in Montana occur to women in their mid to late 20s. Similar to the US, the birth rate among women 30-34 has increased over the past decade – by approximately 9%. The rate of births to women 35-44 years has also increased, although the change is not statistically significant. Among women under 20 years of age, the birth rate has not decreased since 1999.¹
- RACE:** 86% of Montana births in 2008 were to white mothers, 13% were to American Indian/Alaska Native mothers, and 2% were to mothers of other races.¹ The white birth rate in 2008 was 12.3 per 1,000 population, a statistically significant 7.8% increase from the 2000 rate. The American Indian/Alaska Native birth rate in 2008 was 25.3 per 1,000 population, also a 7.8% increase from the 2000 rate, although the difference is not statistically significant.
- MARITAL STATUS:** In 2008, 37% of live births were to unmarried women, a 23% increase since 1999.¹
- MATERNAL EDUCATION:** In 2008, 14% of women who had a live birth had not graduated from high school or earned a GED.¹

MONTANA QUICK STATS (2008)¹

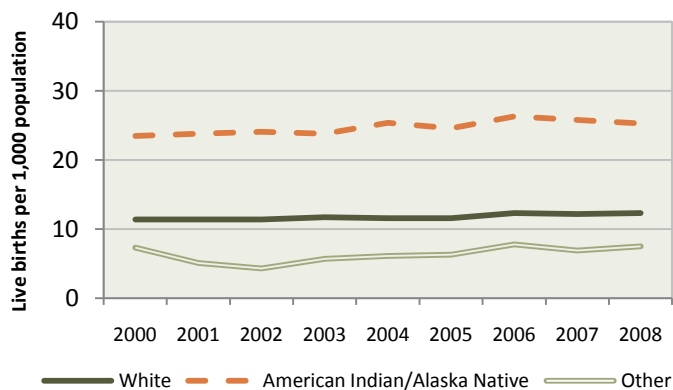
12,595	Number of births
13.0	Crude birth rate, per 1,000 population
69.5	General fertility rate, per 1,000 women 15-44 years
26.8	Median age of mother at delivery

Figure 1: Live birth rates by age group of mother, Montana, 1999-2008



Source: Montana Office of Vital Statistics.¹

Figure 2: Birth rates by race, Montana, 2000-2008



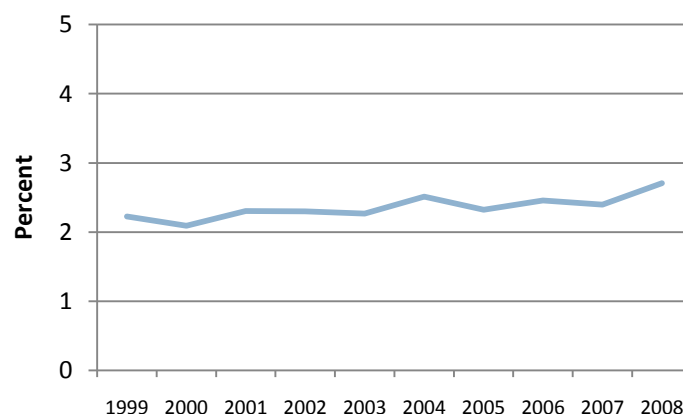
Source: Montana Office of Vital Statistics.¹

Births Overview

RISKS

- **MULTIPLE BIRTHS:** In 2008, 31 of every 1,000 live births was a multiple birth.¹ Although the rate of multiple births appears to be increasing, the change over the last decade is not statistically significant.
- **PRECONCEPTION OBESITY:** Approximately 20% of Montana women who gave birth in 2008 were obese (had a Body Mass Index (BMI) of 30 or above) prior to pregnancy. Twenty-five percent of women were overweight (BMI of 25.0-29.9).¹
- **ALCOHOL USE:** The percent of mothers who report using alcohol during pregnancy has remained fairly steady over the past decade, at approximately 1.7%.¹ In 2008 the prevalence was 1.4%, although the decrease from previous years was not statistically significant.
- **SMOKING:** In 2008, 17% of women reported smoking during pregnancy.¹ (See "Smoking during pregnancy" summary for more detail.)
- **GESTATIONAL DIABETES:** In 2008, 2.7% of women who gave birth had gestational diabetes reported on the birth record. The prevalence of gestational diabetes has increased 21.6% over the past 10 years, from 2.2% [2.0-2.5] in 1999 to 2.7% [2.5-3.0] in 2008.¹ While the trend appears to be an increase in gestational diabetes, the difference in rates is not significant based on 95% confidence intervals.
- **PREGNANCY-RELATED HYPERTENSION:** Four percent of Montana residents who gave birth in 2008 reported pregnancy-related, or gestational, hypertension.¹
- **PREVIOUS PRE-TERM BIRTH:** Among women with a previous live birth who gave birth in 2008, 3% reported that a previous birth was pre-term.¹
- **MATERNAL MORTALITY:** Between 2004 and 2008, seven Montana women died during pregnancy or within 42 days of pregnancy due to causes directly associated with childbirth or pregnancy.¹ The five-year maternal mortality rate for the state is 11.5 deaths per 100,000 live births. The Healthy People 2010 goal is a maternal mortality rate of no more than 3.3 deaths per 100,000 live births.

Figure 3: Gestational diabetes, by year, Montana, 1999-2008
(Note: scale is not to 100)



Source: Montana Office of Vital Statistics.¹

FOCUS GROUP FINDINGS³

Several focus groups were held throughout Montana in 2009 to find out about challenges, concerns, and resources related to maternal and child health issues in the state. Participants included parents of children 0-12 years of age, teenagers, and parents of children with special health care needs.

Parents of children 0-12 years of age (who were also asked about pregnancy and childbirth) said...

- There is a lack of proper health care; long distances to nearest OB/GYN.
- More information is needed for parents on available pregnancy and childbirth resources, including parenting and support groups; what is available and how to reach them.
- Phone calls would help patients be in touch with doctors instead of only office visits.

Sources:

1. Montana Department of Public Health and Human Services. Office of Vital Statistics. 2008 birth data files. Analyzed using SAS 9.2.
2. Centers for Disease Control and Prevention. National Center for Health Statistics. VitalStats. Available at: <http://www.cdc.gov/nchs/vitalstats.htm>. Accessed February 18, 2010.
3. Montana Department of Public Health and Human Services. 2010 Maternal and Child Health Needs Assessment Focus Group Reports. Available at: <http://www.dphhs.mt.gov/PHSD/family-health/mchc/phsd-mch-index.shtml>. Accessed February 12, 2010.

Births Overview

Table 1: Live births, birth rate, and fertility rate by county of residence, Montana, 2004-2008

	LIVE BIRTHS BY COUNTY OF RESIDENCE, MONTANA, 2004-2008					Crude birth rate (Births per 1,000 population), 2004-2008	Fertility rate (Births per 1,000 women 15-44), 2004-2008
	2004	2005	2006	2007	2008		
MONTANA	11514	11573	12499	12437	12595	12.8	67.1
Beaverhead	82	96	88	94	89	10.2	54.1
Big Horn	266	237	289	281	282	21.2	106.5
Blaine	123	121	120	123	104	18.0	99.1
Broadwater	32	34	41	47	55	9.2	54.7
Carbon	110	68	96	85	75	9.0	53.2
Carter	7	9	5	7	4	5.1	28.7
Cascade	1156	1094	1167	1203	1190	14.2	76.5
Chouteau	43	41	39	44	41	7.9	47.9
Custer	125	145	164	124	151	12.7	70.3
Daniels	14	13	9	15	15	7.7	57.3
Dawson	89	97	102	109	93	11.5	69.1
Deer Lodge	94	60	77	73	79	8.6	51.1
Fallon	31	34	52	47	39	15.2	95.4
Fergus	88	90	106	98	108	8.7	55.0
Flathead	1045	1067	1188	1214	1198	13.5	71.6
Gallatin	985	1072	1214	1238	1256	13.7	60.5
Garfield	20	15	19	9	22	14.2	97.9
Glacier	268	259	246	241	306	19.7	96.7
Golden Valley	11	4	7	7	6	6.4	36.0
Granite	20	28	24	23	16	7.8	47.5
Hill	271	256	299	267	323	17.3	91.6
Jefferson	104	95	115	93	89	9.1	50.9
Judith Basin	13	11	14	14	21	7.0	47.0
Lake	349	388	444	423	417	14.3	77.7
Lewis and Clark	694	650	787	729	808	12.4	64.1
Liberty	11	14	12	16	19	7.7	48.0
Lincoln	157	174	183	160	181	9.1	56.3
McCone	11	18	14	15	17	8.7	59.4
Madison	40	57	56	45	62	7.2	43.8
Meagher	19	18	26	24	18	11.0	67.5
Mineral	48	45	51	38	56	12.2	74.9
Missoula	1205	1155	1229	1369	1280	12.0	52.9
Musselshell	42	43	41	35	47	9.4	59.5
Park	146	176	153	154	181	10.2	58.1
Petroleum	3	5	6	1	1	7.0	42.1
Phillips	36	33	41	43	39	9.6	63.7
Pondera	70	80	80	83	65	12.7	74.3
Powder River	11	9	9	15	8	6.1	38.5
Powell	49	58	55	59	47	7.6	59.2
Prairie	7	3	7	6	9	5.9	47.2
Ravalli	397	460	427	402	406	10.5	60.7
Richland	109	97	99	130	131	12.4	73.4
Roosevelt	239	231	239	217	209	22.1	117.6
Rosebud	180	174	164	185	169	19.1	104.0
Sanders	92	90	109	125	118	9.8	60.8
Sheridan	28	22	23	24	22	6.9	51.6
Silver Bow	375	376	417	388	379	11.8	66.1
Stillwater	101	106	101	94	103	11.9	72.3
Sweet Grass	34	41	39	36	39	10.2	62.1
Teton	50	64	64	59	56	9.7	57.2
Toole	45	49	45	47	42	8.9	53.3
Treasure	6	5	5	5	5	7.6	50.7
Valley	71	82	82	75	71	10.9	71.6
Wheatland	16	22	19	18	19	9.3	58.1
Wibaux	8	6	9	7	5	7.7	48.2
Yellowstone	1868	1876	1981	1951	2001	14.0	71.0

Low Birth Weight and Preterm Birth

2010
Montana
MCH
Needs Assessment

OVERVIEW

Birth weight and gestational age are two of the most commonly used indicators of maternal and infant health. Both are related to serious health consequences for an infant and are a risk factor for infant mortality.¹

Because twins and other multiples are more likely to have low birth weights and be born preterm, the majority of the data below relates to singleton births.

DEFINITIONS:

Low birth weight:	<2500 grams (5 lbs, 8 oz)
Moderately low birth weight:	1500-2499 grams
Very low birth weight:	<1499 grams
Preterm:	< 37 completed weeks gestation
Late preterm:	34-36 weeks gestation
Very preterm:	28-33 weeks gestation
Extremely preterm:	27 weeks or less

STATE AND NATIONAL DATA (2006):³

SINGLETON LIVE BIRTHS:	MT	US
Low birth weight rate (less than 2500 grams):	6%	7%
Late preterm birth rate (34-36 completed weeks of gestation):	8%	8%

FINDINGS

- NATIONAL COMPARISON:** Both the US and Montana have experienced an increase in low birth weight rates over the past several years. The Montana rates of low birth weight and preterm birth are similar to those of the US overall.³
- LATE PRETERM BIRTH:** The rate of late preterm (34-36 completed weeks of gestation) births in Montana increased from 5.6% in 1990-91 to 7.8% in 2005-06, one of the largest increases in the country.⁴
- LOW BIRTH WEIGHT:** From 1999 to 2008, Montana's rate of low birth weight among singleton live births increased from 7.6% to 8.2%.²

Objectives

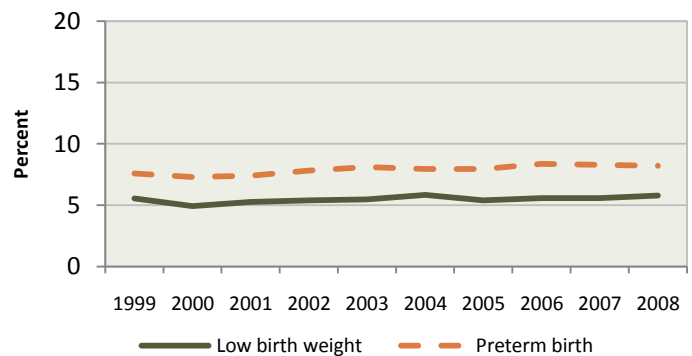
Healthy People 2010

- 16-10: Reduce low birth weight to 5.0% and very low birth weight to 0.9%.
- 16-11: Reduce preterm births to 7.6%.

MONTANA QUICK STATS (2008)²

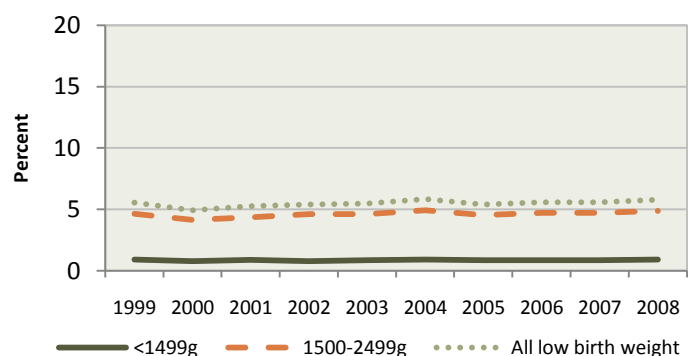
12,595	Number of births
7.4%	Percent of births that were low birth weight (<2500g)
5.8%	Percent of singleton births that were low birth weight
9.8%	Percent of births that were preterm (<37 completed weeks gestation)
8.2%	Percent of singleton births that were preterm

Figure 1: Low birth weight and preterm birth rates, Montana, 1999-2008
(Note: scale is not to 100)



Source: Office of Vital Statistics.² Includes only singleton live births.

Figure 2: Low birth weight, by category, Montana, 1999-2008
(Note: scale is not to 100)



Source: Office of Vital Statistics.² Includes only singleton live births.

Low Birth Weight and Preterm Birth

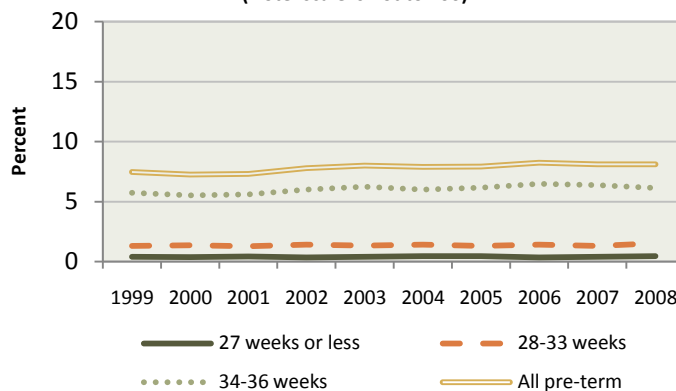
2010
Montana
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Needs Assessment

- AGE:** Infants born to women under 20 are significantly more likely to have a low birth weight than infants born to women 20 or older. Although women under 20 appear to also have higher rates of preterm birth, the difference in 2008 was not statistically significant.²
- RACE:** In 2008, the proportion of singleton births that were low birth weight was the same for white and American Indian mothers. American Indian mothers had a slightly higher, although not significant, proportion of births that were preterm compared to white mothers (10% and 8%, respectively).²
- PRENATAL CARE UTILIZATION:** The mothers of low birth weight and preterm infants born in 2005-2007 were significantly more likely to report no prenatal care than infants of higher birth weights. Among low birth weight infants, 2.3% [1.7-3.0] reported no prenatal care, compared to 0.5% [0.5-0.9] of non low birth weight infants. Among preterm infants, 1.8% [1.4-2.4] had no prenatal care reported, compared to 0.5% [0.4-0.5] of infants with a gestational age over 37 weeks.²
- TYPE OF ATTENDANT:** Low birth weight and preterm births in 2008 were significantly more likely to be delivered by a physician than non low birth weight or preterm infants. Among low birth weight infants, 93.1% [91.2-95.0] were delivered by a physician, compared to 86.2% [85.6-86.8] of higher birth weight births. Among preterm births, 93.3% [91.8-94.9] were delivered by a physician, compared to 86.0% [85.3-86.6] of full term infants.²
- MULTIPLE BIRTHS:** In 2008, 59% of infants born as a twin, triplet, or other multiple were low birth weight. Sixty-four percent were preterm. The proportion of multiple births that are preterm has increased significantly over the past decade. In 1998-99, 56% of births were preterm, compared to 65% in 2006-2008. The proportion of multiple births that are low birth weight also appears to have increased, although the change is not significant.

Sources:

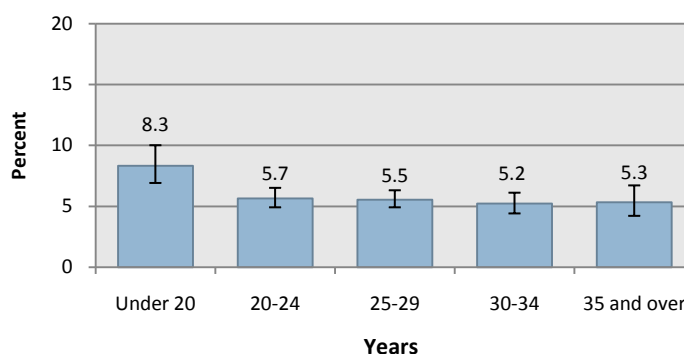
- Martin JA, Hamilton BE, Sutton PD, Ventura SJ, et al. *Births: Final data for 2006*. National vital statistics reports; vol 57 no 7. Hyattsville, MD: National Center for Health Statistics. 2009. Available at: www.cdc.gov/nchs/data/nvsr/nvsr57/nvsr57_07.pdf. Accessed June 16, 2010.
- Montana Department of Public Health and Human Services. Office of Vital Statistics. Birth data files. Analyzed using SAS 9.2.
- Centers for Disease Control and Prevention. National Center for Health Statistics. VitalStats. Available at: <http://www.cdc.gov/nchs/vitalstats.htm>. Accessed February 18, 2010.
- Martin JA, Kirmeyer S, Osterman M, Shepherd RA. *Born a bit too early: Recent trends in late preterm births*. NCHS data brief, no 24. Hyattsville, MD: National Center for Health Statistics. 2009. Available at: <http://www.cdc.gov/nchs/data/databriefs/db24.pdf>. Accessed March 19, 2010.

Figure 3: Preterm birth, by category, Montana, 1999-2008
(Note: scale is not to 100)



Source: Office of Vital Statistics² Includes only singleton live births.

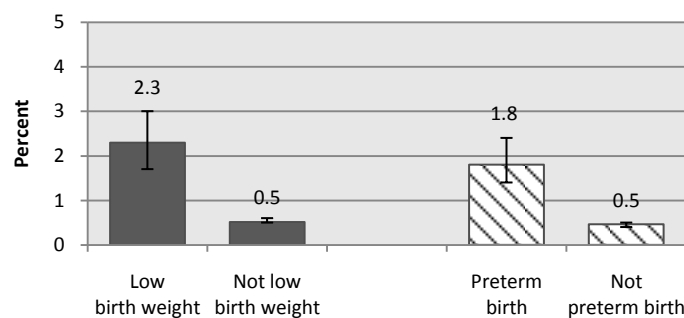
Figure 4: Low birth weight by maternal age, Montana, 2008
(Note: scale is not to 100)



I - Indicates 95% confidence interval.

Source: Office of Vital Statistics² Includes only singleton live births.

Figure 5: Low birth weight and pre-term birth among women with no prenatal care, Montana, 2008
(Note: scale is not to 100)

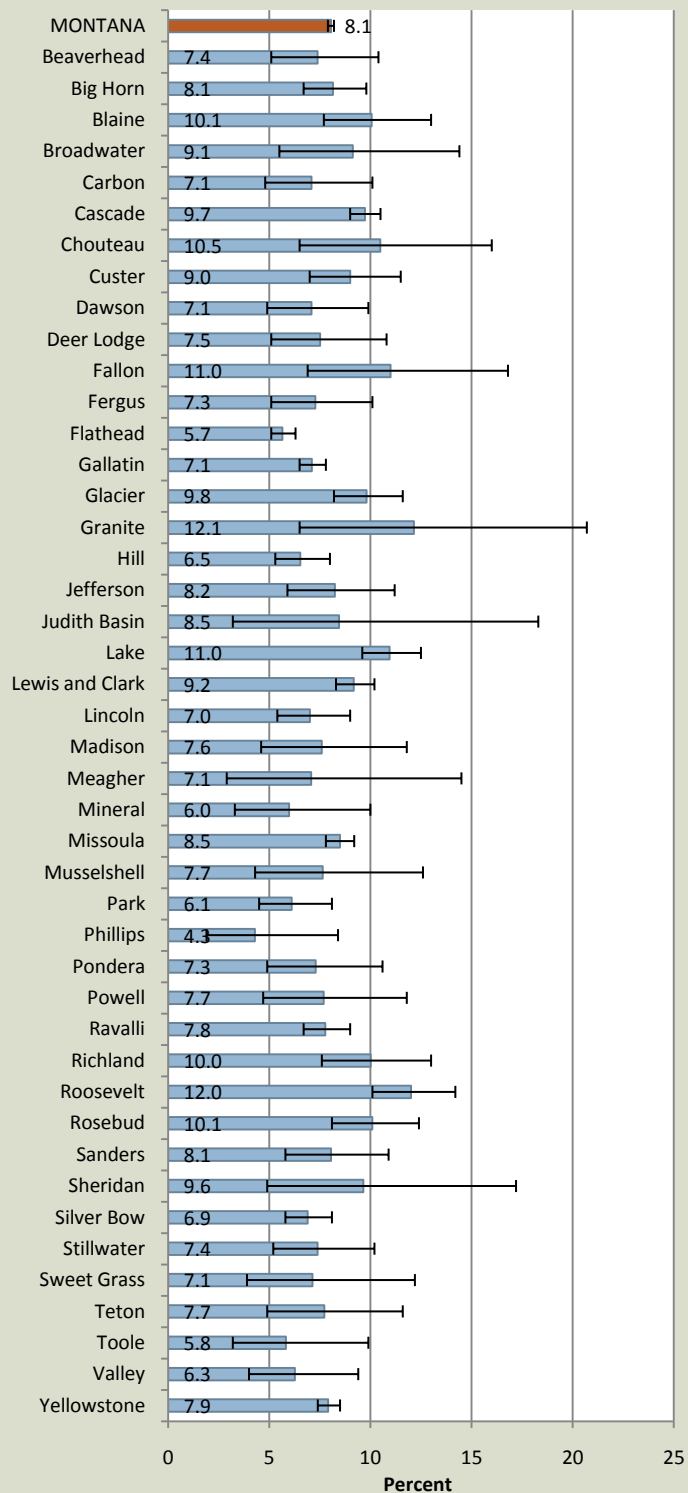


I - Indicates 95% confidence interval.

Source: Office of Vital Statistics² Includes only singleton live births.

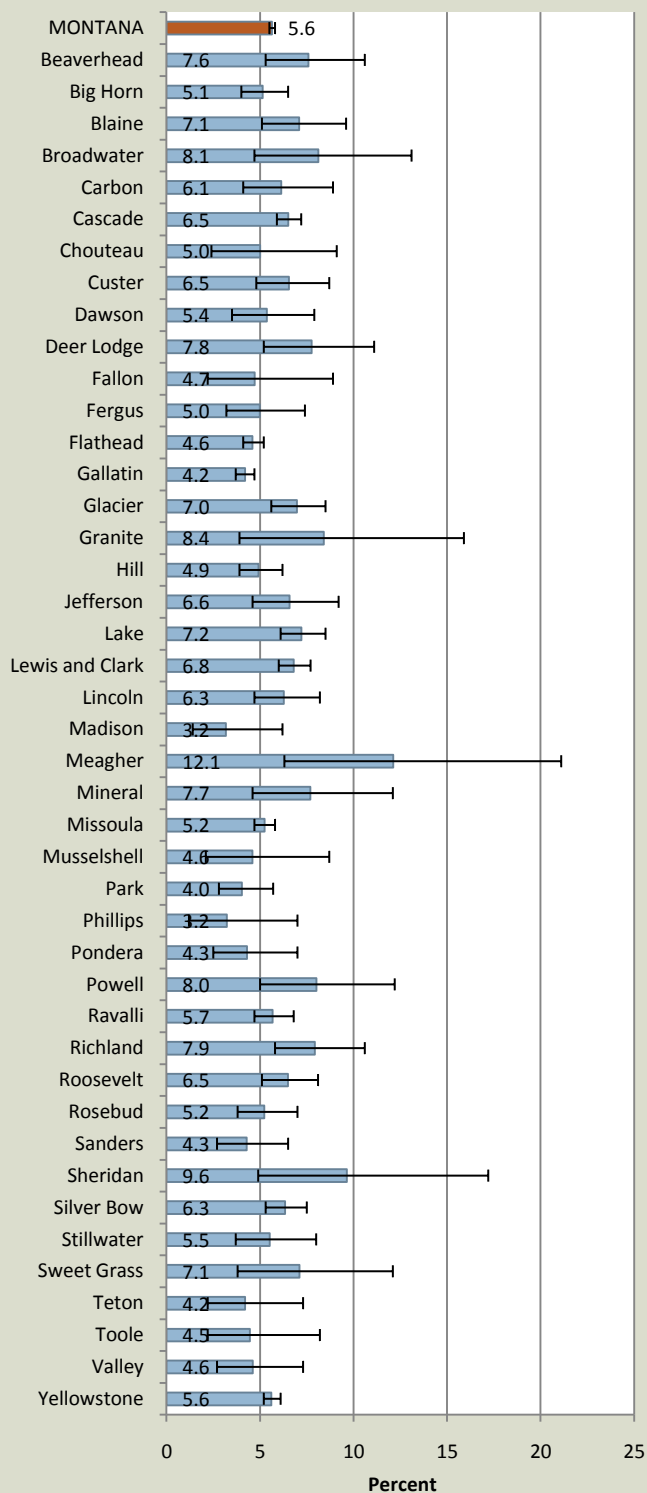
Low Birth Weight and Preterm Birth

Figure 6: Pre-term birth by maternal county of residence, Montana, 2004-2008
(Note: scale is not to 100)



I - Indicates 95% confidence interval.
Counties with fewer than five pre-term births are not shown.
Source: Office of Vital Statistics.¹ Includes only singleton live births.

Figure 7: Low birth weight by maternal county of residence, Montana, 2004-2008
(Note: scale is not to 100)



I - Indicates 95% confidence interval.
Counties with fewer than five low birth weight births are not shown.
Source: Office of Vital Statistics.¹ Includes only singleton live births.

Newborn Screening

2010
Montana
MCH
Needs Assessment

OVERVIEW

Newborn screening – “is the practice of testing all babies for certain disorders and conditions that can hinder their normal development.”¹

Since 2007, the Montana State Law mandates that all newborns delivered in Montana be screened within the first month of life for 29 conditions including hearing loss.²

Montana’s Universal Newborn Hearing Screening and Intervention (UNHSI) program is based on the national “1-3-6” program standards.

SCREENING: All infants should be screened before 1 month of age.

EVALUATION: All infants who do not pass hearing screening should have an audiological evaluation before 3 months of age.

INTERVENTION: All infants with hearing loss should receive intervention services before 6 months of age.

FINDINGS

- NEWBORN SCREENING CASES: In 2008, congenital hypothyroidism was the most common disorder identified among Montana infants by newborn screening.³
- HEARING: Montana’s rate of newborns screened for hearing prior to hospital discharge increased from 88% in 2005 to 93% in 2008.³
- FOLLOW-UP: In 2008, 17 infants were identified through newborn screening as having a condition that required follow-up. One hundred percent of the children received timely follow-up care.³

Objectives

Healthy People 2010

28-11: (Developmental) Increase the proportion of newborns who are screened for hearing loss by age 1 month, have audiology evaluation by age 3 months, and are enrolled in appropriate intervention services by age 6 months.

MONTANA QUICK STATS (2008)³

99%

Montana newborns receiving at least one screen

93%

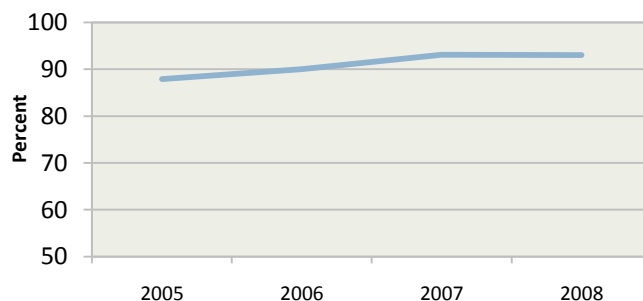
Montana children screened by 1 month of age for hearing loss

Table 1: Number of Montana newborns with confirmed cases identified through newborn screening

Type of Screening Test	Number of confirmed cases
Congenital Hypothyroidism (CH)	9
Cystic Fibrosis (CF)	3
Fatty Acid Oxidation Disorders (CUD; MCAD; LCHAD; VLCAD; TFP)	1
Organic Aciduria Disorders (HMG; 3MCC; BKT; GA1; IVA; MUT; CblA,B; MCD;PROP)	1
Phenylketonuria (PKU)	1
Sickle Cell Disease	1

Source: Montana Newborn Screening System.³

Figure 1: Newborns screened for hearing before hospital discharge, Montana, 2004-2008
(Note: scale only shows 50 to 100)



Source: Montana Newborn Screening System.^{3,4}

Sources:

- U.S. National Library of Medicine, Genetic Home Reference. [Web page] <http://ghr.nlm.nih.gov/nbs>. Accessed July 12, 2010.
- Montana Department of Public Health and Human Services. Family & Community Health Bureau Section. Available at: <http://www.dphhs.mt.gov/PHSD/family-health/newborn/newborn-screening.shtml>. Accessed May 24, 2010.
- Montana Newborn Screening Program, 2008.
- Montana Department of Public Health and Human Services, Office of Vital Statistics. Birth data files, 2008.

Last updated June 4, 2010

Mental Health

2010
Montana
MCH
Needs Assessment

OVERVIEW

Mental health - "the successful performance of mental function, resulting in productive activities, fulfilling relationships with other people, and the ability to adapt to change and to cope with adversity; from early childhood until late life, mental health is the springboard of thinking and communication skills, learning, emotional growth, resilience, and self-esteem."¹

STATE AND NATIONAL DATA (2007)²

	MT	US
Children 2- 17 years, with problems requiring counseling, who did not receive mental health care:	32%	40%

FINDINGS

- NATIONAL COMPARISON:** Over the past few years, the rate of Montana high school students who felt sad or hopeless almost every day (2 or more weeks in a row) so that they stopped doing some usual activities presented a fairly flat trend, similar to the US. In 2009, 27.3% [24.4-30.4] of Montana high school students and 26.1% [24.8-27.5] of US high school students reported feeling sad or hopeless.³
- MEDICATION:** In 2007, almost 6% of Montana children 2-17 years were taking medication for attention-deficit hyperactivity disorder (ADHD), emotions, concentration, or behavioral issues.²
- HEALTHY PEOPLE 2010 COMPARISON:** Montana has not met the Healthy People 2010 goal of reducing the rate of suicide attempts by adolescents to a 12-month average of 1%. In 2009, almost 3% of high school students reported a suicide attempt during the past year that resulted in an injury, poisoning, or overdose that had to be treated by a doctor or nurse.³

Objectives

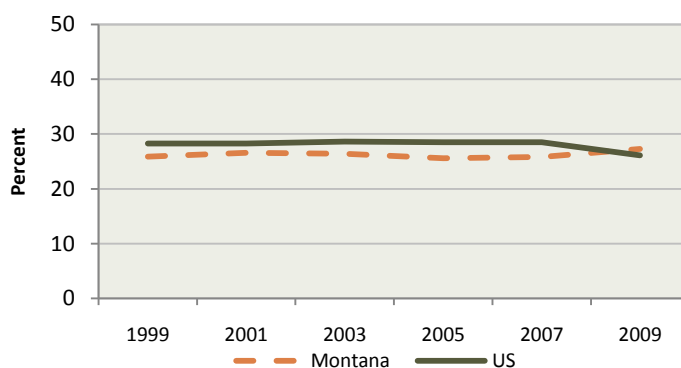
Healthy People 2010

- 18-2: Reduce the rate of suicide attempts by adolescents to a 12-month average of 1%.
- 18-7: (Developmental) Increase the proportion of children with mental health problems who receive treatment.

MONTANA QUICK STATS (2008)⁴

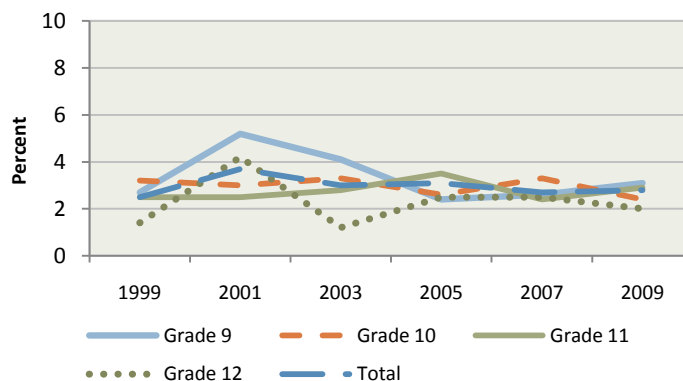
81	Psychiatrists
497	Licensed social workers
820	Licensed clinical professional counselors

Figure 1: High school students who felt sad or hopeless in the past year, Montana and United States, 1999-2009
(Note: scale is not to 100)



Source: Youth Risk Behavior Survey.³

Figure 2: High school students ever injured from a suicide attempt in the past year, by grade, Montana, 1999-2009
(Note: scale is not to 100)



Source: Youth Risk Behavior Survey.³

Mental Health

2010
Montana
MCH
Needs Assessment

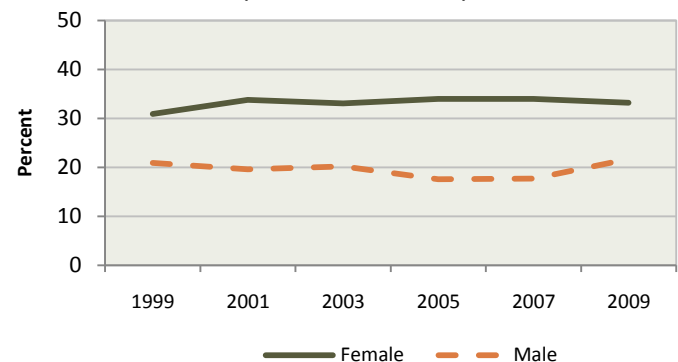
FOCUS GROUP FINDINGS⁵

Several focus groups were held throughout Montana in 2009 to find out about challenges, concerns, and resources related to maternal and child health issues in the state. Participants included parents of children 0-12 years of age, teenagers, and parents of children with special health care needs.

Adolescents who were asked about emotional health said...

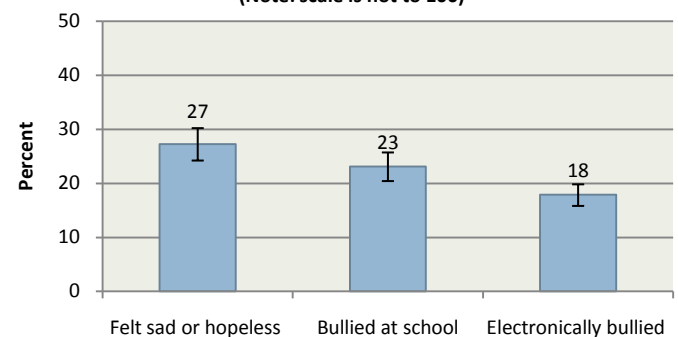
- Family problems, “breakups” with boy/girl friends, school pressure and bullying were the most common reasons teens feel depressed or angry. In 2009, 33% of Montana female high school students felt sad or hopeless almost every day (2 or more weeks in a row) so that they stopped doing some usual activities, compared to 22% of high school boys.³
- Bullying, including cyber bullying via cell phones, internet, and email were listed as a “huge” problem in all communities. During 2009, 23% of Montana high school students were bullied at school and 18% were bullied electronically, such as through e-mail, chat rooms, instant messaging, web sites, or text messaging.³
- Focus group participants mentioned several ways to deal with bullying such as “ignore it”, “fight back”, “stand up for the person being bullied”, talk to a counselor, friends or parents, or use a hotline.

Figure 3: High school students who felt sad or hopeless in the past year, by gender, Montana, 1999-2009
(Note: scale is not to 100)



Source: Youth Risk Behavior Survey.³

Figure 4: High school students who experienced emotional or behavioral disturbances in the past year, Montana, 2009
(Note: scale is not to 100)



I - Indicates 95% confidence interval.
Source: Youth Risk Behavior Survey.³

Sources:

1. U.S. Department of Health and Human Services. Substance Abuse and Mental Health Services Administration. Center for Mental Health Services. National Institutes of Health. National Institute of Mental Health. *Mental Health: A Report of the Surgeon General – Executive Summary, 1999*. Available at: <http://www.surgeongeneral.gov/library/mentalhealth/summary.html>. Accessed May 19, 2010.
2. Child and Adolescent Health Measurement Initiative. 2007 National Survey of Children's Health. Data Resource Center for Child and Adolescent Health. Available at: <http://nschdata.org/StateProfiles/IndicatorSelection07.aspx>. Accessed April 1, 2010.
3. Centers for Disease Control and Prevention. 1991-2009 High School Youth Risk Behavior Survey Data. Available at: <http://apps.nccd.cdc.gov/youthonline>. Accessed July 12, 2010.
4. Montana Department of Labor and Industry, 2008.
5. Montana Department of Public Health and Human Services. 2010 Maternal and Child Health Needs Assessment Focus Group Reports. Available at: <http://www.dphhs.mt.gov/PHSD/family-health/mchc/phsd-mch-index.shtml>. Accessed February 12, 2010.

Alcohol, Tobacco, and Drug Use

2010
Montana
MCH
Needs Assessment

OVERVIEW

Health-risk behaviors such as alcohol, tobacco, and drug use among youth are associated with many serious health and societal problems. These behaviors can contribute to chronic diseases, injuries, violence, unplanned pregnancies, and social and familial disruption.

STATE AND NATIONAL DATA (2009)²

HIGH SCHOOL STUDENTS:	MT	US
Binge drank ≥ 5 drinks at one time:	30%	24%
Drank ≥ 1 drink of alcohol on school property:	5%	5%

FINDINGS

- NATIONAL COMPARISON – DRINKING:** In 2009, the prevalence of Montana high school students who had at least 5 drinks of alcohol in a row within a couple of hours on at least one day in the past 30 days was significantly higher than the US.²
- NATIONAL COMPARISON – SMOKING:** In 2009, the prevalence of Montana high school students who smoked more than 10 cigarettes per day on the days they smoked was significantly lower than the US.²
- DRUG USE:** The reported use of meth among Montana high school students has declined since 2003, while the reported use of other drugs has not declined to the same extent.¹
- HEALTHY PEOPLE 2010 COMPARISON:** Montana has not met the Healthy People 2010 goal of reducing the proportion of high school seniors engaging in binge drinking to 11%. In 2009, 45% of Montana high school seniors reported binge drinking.¹

Objectives

Healthy People 2010

- 27-2: Reduce tobacco use by adolescents in grades 9-12 to 21%.
- 26-9: Increase the average age of first use of alcohol in adolescents to 16.1 years.
- 26-11: Reduce the proportion of high school seniors engaging in binge drinking to 11%.

MONTANA QUICK STATS (2009)¹

- 24% Students who drank alcohol for the first time before age 13 years
- 10% Students who tried marijuana for the first time before age 13 years
- 12% Students who smoked a whole cigarette for the first time before age 13 years

Figure 1: Tobacco use among high school students, Montana and United States, 2009
(Note: scale is not to 100)

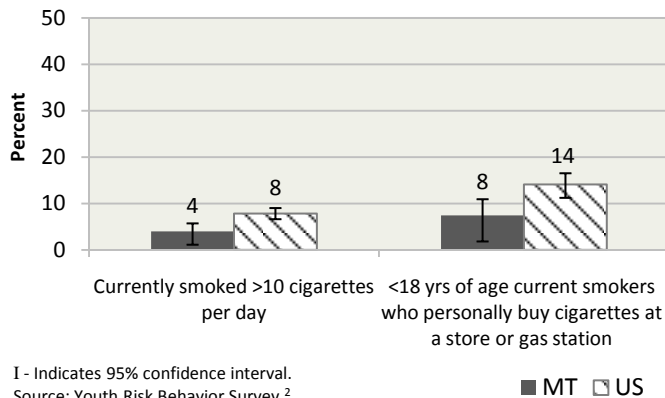
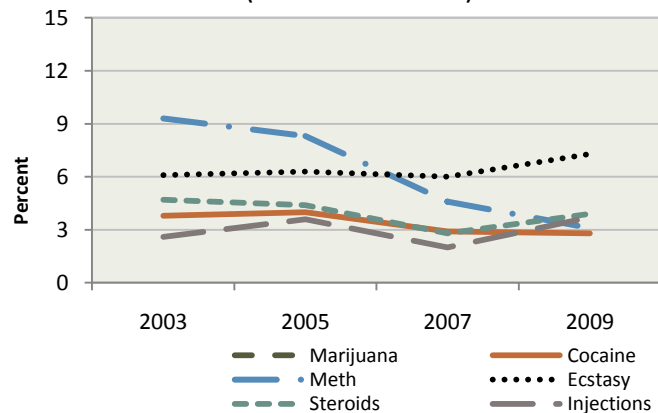


Figure 2: Drug use among high school students, Montana, 2003 -2009
(Note: scale is not to 100)



Sources:

- Montana Youth Risk Behavior Surveillance Survey, 1999-2009. Analyzed using SPSS 15.0.
- Centers for Disease Control and Prevention (CDC). 1991-2009 High School Youth Risk Behavior Survey Data. Available at: <http://apps.nccd.cdc.gov/youthonline>. Accessed June 3, 2010.

Breastfeeding

OVERVIEW

Breastfeeding has been linked to decreased risk of ear infections, gastro-intestinal illness, and respiratory infections in infants. Children who are breastfed may have lower risk for asthma, obesity, and diabetes. In mothers, breastfeeding has been linked to a lower risk of type 2 diabetes, breast cancer, and ovarian cancer.¹

Definitions:

- Ever breastfed: An infant was ever breastfed or given breastmilk, regardless of duration.
- Exclusively breastfed: Infant only received breastmilk, and no other liquids, including water, or solids.²

STATE AND NATIONAL DATA (2006)³

INFANTS:	MT	US
Ever breastfed:	83%	74%
Breastfed at 12 months of age:	31%	23%
Exclusively breastfed at 6 months:	21%	14%

FINDINGS

- INITIATION: In 2008 (the first year it was collected on the birth record), 76% of mothers reported initiating breastfeeding before hospital discharge. Twelve percent of mothers reported not breastfeeding, and breastfeeding status was unknown for the remaining 12%.⁴
- HEALTHY PEOPLE 2010: As of 2009, Montana was one of only 10 states to have met the Healthy People 2010 objectives for breastfeeding.⁵
- STATEWIDE TREND: Montana's rate of breastfeeding initiation remained fairly stable – at about 81% - from 2000-2006. Breastfeeding at 6 months and 12 months, and exclusive breastfeeding at 6 months, appear to be increasing.³
- WIC TREND: The prevalence of breastfeeding among WIC participants has remained fairly steady in recent years, at about 75% for ever breastfeeding and 32% for breastfeeding at 6 months.⁶

Objectives

Healthy People 2010

16-19: Increase the proportion of mothers who breastfeed their infants:

- a - in the early postpartum period to 75%.
- b - at 6 months of age to 50%.
- c - at 1 year of age to 25%.
- d - exclusively for 3 months to 40%.
- e - exclusively for 6 months to 17%.

MONTANA QUICK STATS

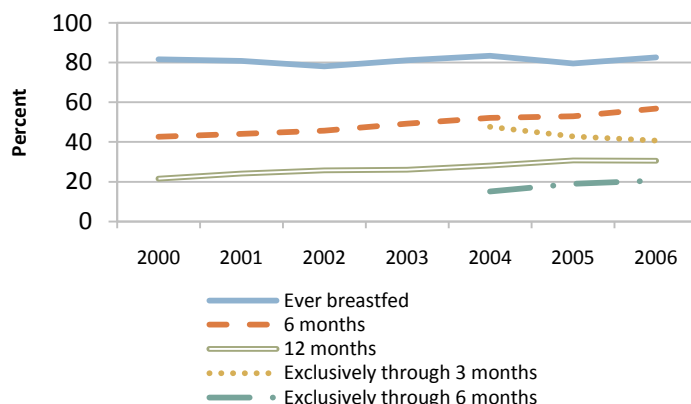
17.8%

Breastfed infants receiving formula before 2 days of age (2007)²

2.25

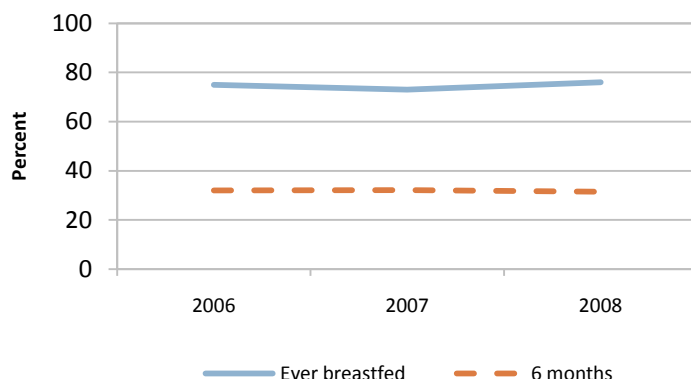
Number of International Board Certified Lactation Consultants (IBCLCs) per 1000 live births (2009)²

Figure 1: Breastfeeding initiation, duration, and exclusivity, by year of infant birth, Montana, 2000-2006



Source: National Immunization Survey.³ Exclusive breastfeeding only available for 2004-06.

Figure 2: Breastfeeding among WIC participants, Montana, 2006-2008



Source: Pediatric Nutrition Surveillance System (PedNSS).⁶

Breastfeeding

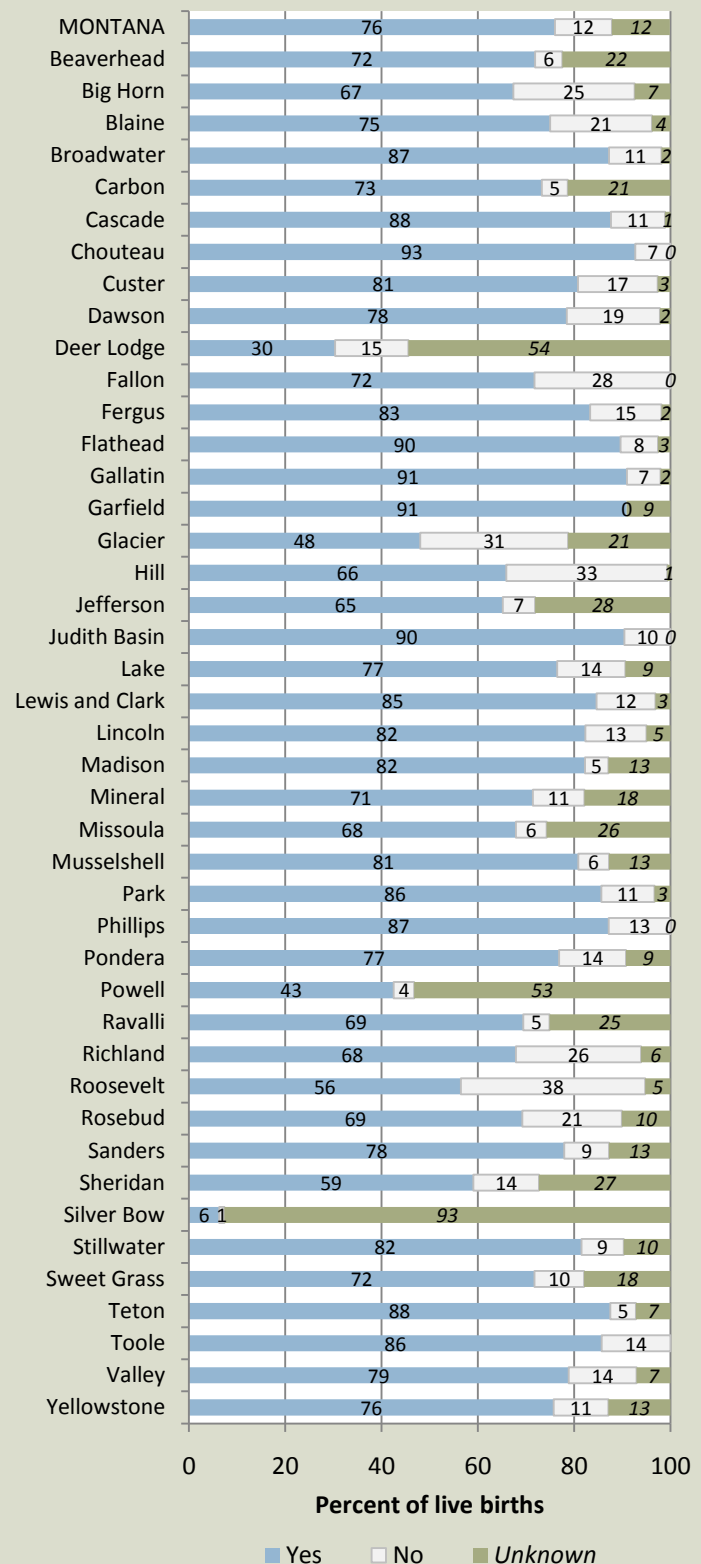
2010
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Needs Assessment

- WIC PARTICIPATION:** Women who reported participating in WIC during their pregnancy were significantly less likely to be breastfeeding at hospital discharge than women who did not participate in WIC. Seventy percent of women who participated in WIC reported breastfeeding at discharge, compared to 84% of non-WIC participants.⁴
- REPORTING:** In 2008, the percent of live birth records with unknown breastfeeding status at hospital discharge ranged from 0% to 93% by county of residence.⁴
- MARITAL STATUS:** Women who were married were significantly more likely to report breastfeeding at hospital discharge than unmarried women. Eighty-two percent of married women reported breastfeeding, compared to 67% of unmarried women.⁴
- AGE:** Women under 20 years of age were significantly less likely to report breastfeeding at hospital discharge than women 20 and older. Sixty-seven percent of women under 20 reported breastfeeding at discharge, compared to 73% of women 20-24 years, 78% of women 25-29, 79% of women 30-34, and 79% of women 35 years of age and older.⁴
- RACE:** White mothers were significantly more likely to report breastfeeding at hospital discharge than American Indian mothers. Seventy-eight percent of white women reported breastfeeding at discharge in 2008, compared to 60% of American Indian women.⁴

Sources:

1. US Department of Public Health and Human Services. Benefits of Breastfeeding [Web page]. Available at: <http://www.womenshealth.gov/breastfeeding/benefits/>. Accessed March 18, 2010.
2. Centers for Disease Control and Prevention. Breastfeeding Report Card, United States: Process Indicators [Web page]. Available at: http://www.cdc.gov/breastfeeding/data/report_card3.htm. Accessed March 18, 2010.
3. Centers for Disease Control and Prevention. National Immunization Survey, Data Tables and Maps [Web page]. Available at: http://www.cdc.gov/breastfeeding/data/NIS_data/index.htm. Accessed March 18, 2010.
4. Montana Department of Public Health and Human Services. Office of Vital Statistics. 2008 birth data files. Analyzed using SAS 9.2.
5. Centers for Disease Control and Prevention. Breastfeeding Report Card, United States: Outcome Indicators [Web page]. Available at: http://www.cdc.gov/breastfeeding/data/report_card2.htm. Accessed March 18, 2010.
6. Polhamus B, Dalenius K, Mackintosh H, Smith B, et al. *Pediatric Nutrition Surveillance 2008 Report*. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention; 2009:5.
7. Polhamus B, Dalenius K, Borland E, Mackintosh H, et al. *Pediatric Nutrition Surveillance 2007 Report*. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention; 2009:2.
8. Polhamus B, Dalenius K, Borland E, Smith B, et al. *Pediatric Nutrition Surveillance 2006 Report*. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention; 2007:2.

Figure 3: Breastfeeding at hospital discharge, by county of residence, Montana, 2008



Counties with fewer than 20 live births are not shown.

Source: Office of Vital Statistics.⁴

Children with Special Health Care Needs (CSHCN)

2010
Montana
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OVERVIEW

The federal Maternal and Child Health Bureau defines children with special health care needs (CSHCN) as:
*"those who have or are at increased risk for a chronic physical, developmental, behavioral, or emotional condition and who also require health and related services of a type or amount beyond that required by children generally"*¹

STATE AND NATIONAL DATA (2005-2006)²

	MT	US
Prevalence of CSHCN:	14%	14%
% of CSHCN:		
In households with incomes below 200% of the federal poverty level:	52%	41%
Whose health conditions consistently affect their daily lives, often a great deal:	29%	24%
Ages 5-11 with 11 or more school absences due to illness:	19%	14%

FINDINGS

- REGIONAL COMPARISON: In 2005-2006, Montana had the 2nd highest prevalence of children with special health care needs compared to neighboring states.²
- TREND: The prevalence of CSHCN in Montana increased from 12% (an estimated 26,981 children) in 2001 to 14% (an estimated 27,853 children) in 2005-2006. The prevalence of CSHCN increased by approximately 2% from 2001 to 2005-2006 for both children 6-11 years and 12-17 years of age.²
- INSURANCE COVERAGE: Children with insurance coverage were more likely to have their necessary special health care needs met than children without insurance. Insured CSHCN who required two or more specific health care services were significantly more likely to receive the required services than children without insurance.²

Objectives

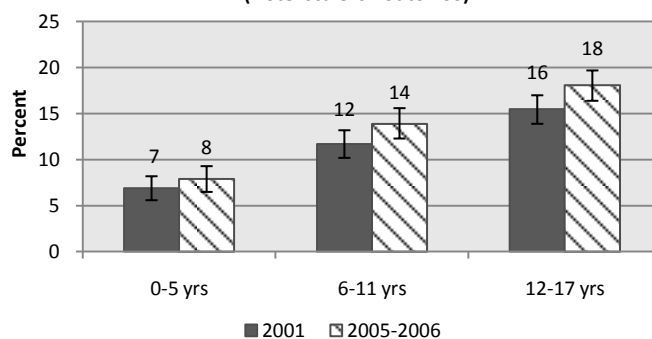
Healthy People 2010

6-2: Reduce the proportion of children and adolescents with disabilities who are reported to be sad, unhappy, or depressed to 17%.

MONTANA QUICK STATS

27,853	Children 0-17 years of age with special health care needs (2005-2006) ²
5,053	Children with special health care needs served by Title V of the Social Security Act (2008) ³
3	Regional pediatric specialty clinics (2009) ⁶

Figure 1: Prevalence of CSHCN by age, Montana, 2001 and 2005-2006
 (Note: scale is not to 100)



I - Indicates 95% confidence interval.

Source: National Survey of Children with Special Health Care Needs.²

Table 1: Montana CSHCN health coverage and access to care

	2001	2005-2006
Health Insurance Coverage:		
CSHCN without insurance at some point in the past year	20% [16.1-23.5]	17% [14.2-20.7]
Currently insured CSHCN whose insurance is inadequate	39% [34.5-43.3]	34% [29.6-37.4]
CSHCN whose families have adequate private and/or public insurance to pay for the services they need	49% [44.5-53.3]	55% [51.2-59.3]
Access to Care:		
CSHCN with any unmet need for specific health care services	22% [18.4-26.2]	22% [27.3-28.5]
CSHCN without a usual source of care when sick (or who rely on the emergency room)	11% [7.9-13.5]	7% [5.2-9.6]
Family Centered Care:		
CSHCN without family-centered care	32% [27.3-35.8]	38% [33.6-41.8]
CSHCN whose families are partners in decision making at all levels, and who are satisfied with the services they receive	54% [47.8-60.0]	57% [52.4-60.5]

Source: National Survey of Children with Special Health Care Needs.²

Children with Special Health Care Needs (CSHCN)

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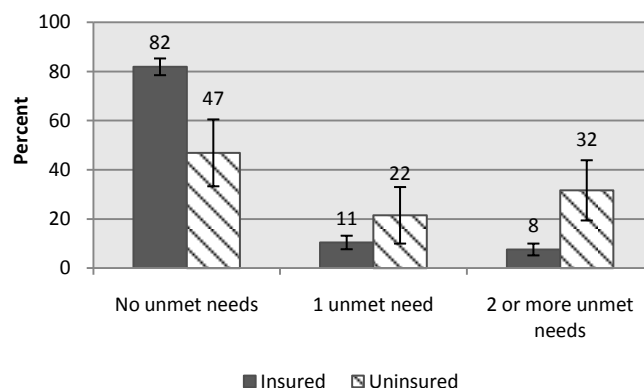
FOCUS GROUP FINDINGS

Several focus groups were held throughout Montana in 2009 to find out about challenges, concerns, and resources related to maternal and child health issues in the state. Participants included parents of children 0-12 years of age, teenagers, and parents of children with special health care needs.

Parents of children with special health care needs (CSHCN) prioritized the following challenges and concerns:

1. Finding resources, services and information.⁴
In 2005-2006, 15% of Montana CSHCN had conditions that required above routine use of medical, mental health, or other services.²
2. Finances.⁴
In 2005-2006, 26% of CSHCN families paid \$1,000 or more out of pocket in medical expenses per year for their child.²
3. Health care specialists in the state.⁴
4. Health care providers accepting Medicaid children.⁴
In 2005-2006, 36% of CSHCN were covered at least partially by public health insurance.²
5. Coordination of services.⁴
In 2005-2006, 46% of Montana CSHCN received coordinated, ongoing, comprehensive care within a medical home.²
6. Health care services for children regardless of age.⁴
7. Respect and courtesy from all professionals.⁴
In 2005-2006, 57% of families of CSHCN were partners in decision-making at all levels and satisfied with the services they receive.²
8. Medicaid coverage for all disabled children, children who are chronically ill, or have life-threatening illness, regardless of income.⁴
9. Family therapy with a therapist who understands how disability affects the whole family.⁴
10. Support from the school system.⁴
In 2009, 33% of Montana high school students with disabilities were bullied on school property within the past 12 months.⁵

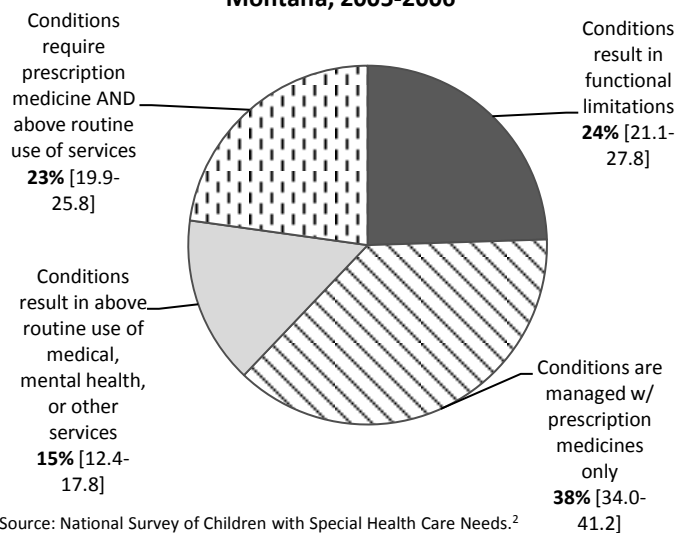
Figure 2: CSHCN 0-17 years of age with any unmet need for specific health care services, Montana, 2005-2006



I - Indicates 95% confidence interval.

Source: National Survey of Children with Special Health Care Needs.²

Figure 3: Specific types of health care needs of CSHCN 0-17 years of age, Montana, 2005-2006



Source: National Survey of Children with Special Health Care Needs.²

Sources:

1. McPherson M, Arango P, Fox H, et al. *A new definition of children with special health care needs*. Pediatrics. 1998; 102: 137-140.
2. Child and Adolescent Health Measurement Initiative. 2001 and 2005/06 National Survey of Children with Special Health Care Needs, Data Resource Center for Child and Adolescent Health. Available at: <http://cshcndata.org/DataQuery/SurveyAreas.aspx?yid=>. Accessed February 26, 2010.
3. U.S. Department of Health and Human Services. Maternal and Child Health Bureau. Title V Information System. Montana 2008 MCH Block Grant Report. Available at: <https://perfdata.hrsa.gov/MCHB/mchreports/Search/program/prgsch04.asp>. Accessed February 26, 2010.
4. Montana Department of Public Health and Human Services. 2010 Maternal and Child Health Needs Assessment Focus Group Reports. Available at <http://www.dphhs.mt.gov/PHSD/family-health/mchc/phsd-mch-index.shtml>. Accessed February 12, 2010.
5. Montana Office of Public Instruction. 2009 Montana Youth Risk Behavior Survey. *High School Student Frequency Distribution for Students with Disabilities*. Available at: http://www.opi.mt.gov/pdf/YRBS/09/Reports/09Students_Disabilities.pdf. Accessed July 12, 2010.
6. Montana Department of Public Health and Human Services. Children's Special Health Services Program, 2010.

Exposure to Secondhand Smoke

2010
Montana
MCH
Needs Assessment

OVERVIEW

Cigarette smoke and other forms of tobacco exposure during early childhood and the prenatal period adversely affect the health of children. Tobacco exposure at a young age is associated with chronic respiratory diseases such as asthma, bronchitis, and lung cancer.

STATE AND NATIONAL DATA (2007)³

	MT	US
% of children 0-17 years of age who live in households where someone uses tobacco:	27%	26%
% of children 0-17 years of age who live in households where someone uses tobacco inside the house:	5%	8%

FINDINGS

- **NATIONAL COMPARISON:** In Montana, the proportion of children living in a house where someone uses tobacco is similar to the national proportion.³
- **INCOME:** In 2007, the percent of Montana children who lived in households where someone smoked was significantly higher among children in low income households than those in high income households.³
- **AWARENESS:** In 2008, 63% of Montanans were aware that secondhand smoke is a risk factor for SIDS.⁴
- **HOME:** In 2008, approximately 12% of Montana households with children permitted smoking at any time or any place in the home.⁴
- **MEDICAL CONDITIONS:** In 2005-2006, 27% of Medicaid-enrolled children 0-4 years of age in Montana were diagnosed with possible bronchitis.⁵

Objectives

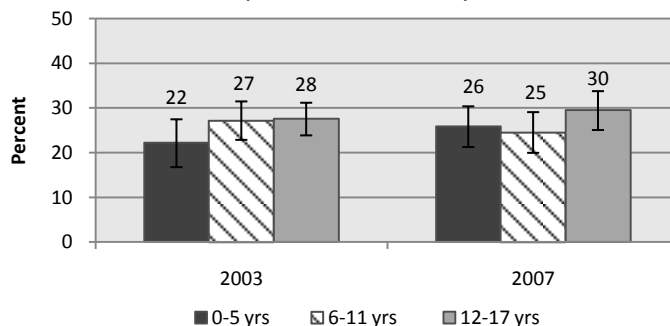
Healthy People 2010

27-9: Reduce the proportion of children who are regularly exposed to tobacco to 10%.

MONTANA QUICK STATS

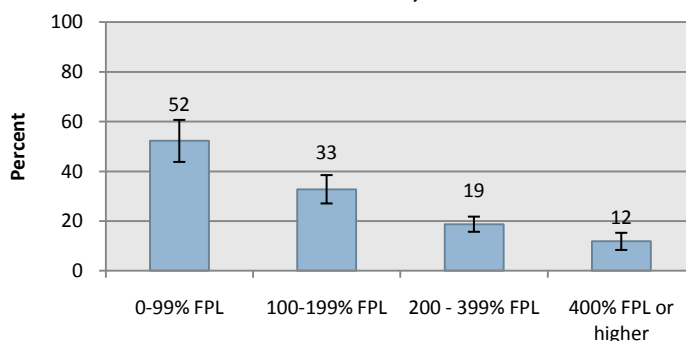
- 19% Adults who are current smokers (2008)¹
- 97% Adults aware that breathing secondhand tobacco smoke causes respiratory problems in children (2008)²
- 2005 Clean Indoor Air Act passed by Montana legislature, schools required to be tobacco-free, public places required to be smoke-free
- 2009 Montana Clean Indoor Air Act fully implemented (October 1)

Figure 1: Children who live in households where someone uses tobacco, by age group, Montana, 2003 and 2007
(Note: scale is not to 100)



I - Indicates 95% confidence interval.
Source: National Survey of Children's Health.³

Figure 2: Children who live in households where someone uses tobacco, by household income level, Montana, 2007



FPL: Federal Poverty Level.
I - Indicates 95% confidence interval.
Source: National Survey of Children's Health.³

Exposure to Secondhand Smoke

2010
Montana
MCH
Needs Assessment

TOBACCO USE AMONG SCHOOL-AGED CHILDREN

- In 2009, approximately 12% of Montana high school youth tried cigarettes before the age of 13.⁶
- In 2009, of the Montana high school youth who smoked cigarettes in the past 30 days, 22% also reported having asthma.⁶
- Thirty-three percent of Montana high school students reported being in a car with someone who was smoking in the past 30 days in 2008.⁷
- The proportion of Montana high school students who reported being in the same room with someone who was smoking in the past 30 days was 43% in 2008.⁷

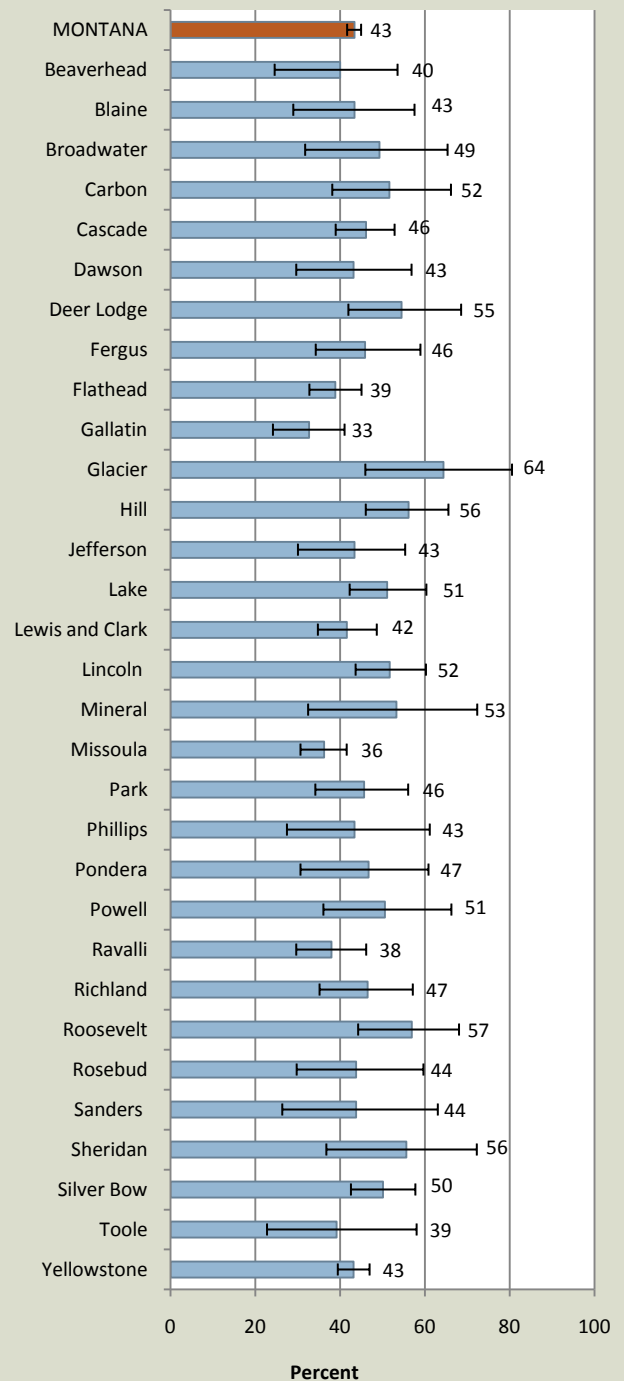
GEOGRAPHIC DIFFERENCES

- In Montana, exposure to secondhand smoke varies by county.
- In at least 32 of 56 counties in the state, 33% or more of high school students reported being in a room in the past 30 days with someone who was smoking.⁸

Sources:

- Montana Behavioral Risk Factor Surveillance System, 2008. Analyzed using SPSS 15.0.
- Montana Department of Public Health and Human Services. Montana Tobacco Use Prevention Program. Montana Adult Tobacco Survey 2008-2009. Progress Report. 2009;4.
- Child and Adolescent Health Measurement Initiative. 2007 National Survey of Children's Health, Data Resource Center for Child and Adolescent Health. Available at: <http://www.nschdata.org/DataQuery/DataQueryResults.aspx>. Accessed February 2, 2010.
- Montana Department of Public Health and Human Services. Montana Tobacco Use Prevention Program. Montana Adult Tobacco Survey 2008. Available at: <http://tobaccofree.mt.gov/publications/index.shtml>. Accessed July 13, 2010.
- Montana Department of Public Health and Human Services. Montana Asthma Control Program. *The Burden of Asthma in Montana: Challenges and opportunities related to asthma management and control*. 2007;16.
- Montana Youth Risk Behavior Survey, 2009. Analyzed using SPSS 15.0.
- Montana Department of Public Health and Human Services. Montana Tobacco Use Prevention Program. Trends in Youth Tobacco Use and Attitudes 2000-2006; 36-37.
- Montana Department of Public Health and Human Services. Addictive & Mental Disorders Division. Prevention Needs Assessment, 2006 and 2008.

Figure 3: High school students exposed to smoke by someone smoking in the same room as them, by county of residence, Montana, 2008



I - Indicates 95% confidence interval.

Source: Prevention Needs Assessment Survey.⁸

Counties not listed on this chart have sample size <20 or have no data available.

Labor and Delivery

2010
Montana
MCH
Needs Assessment

OVERVIEW

Factors associated with labor and delivery can affect infant outcomes such as birth weight and preterm birth. Recent research suggests that increasing rates of cesarean sections and induced labor may be associated with higher rates of low birth weight and late preterm (34-36 completed weeks of gestation) births. Because labor and delivery for twins and other multiples may be managed differently than for singleton births, the majority of the data focuses on singleton births.

STATE AND NATIONAL DATA (2006)²

SINGLETON LIVE BIRTHS:	MT	US
C-section rate:	27%	30%
Induced labor:	27%	23%

FINDINGS

- LOCATION OF BIRTH: In 2008, 96% of births occurred in a hospital. Two percent occurred at home, and 2% occurred at a birthing center or other type of location.¹
- ATTENDANT AT DELIVERY: The official attendant at the birth was a physician in 85% of the 2008 Montana births. Certified nurse-midwives attended 9% of the births, direct entry or other types of midwives and other types of providers each attended under 2% of births.¹
- METHOD OF DELIVERY: In 2008, 72% of singleton births in Montana were vaginal delivery and 28% were cesarean delivery. The percent of births delivered vaginally has declined over the past decade, while the rate of cesarean births has increased.¹
- NATIONAL COMPARISON, C-SECTIONS: Montana's rate of cesarean sections is significantly lower than the US rate, although the rate is increasing, similar to the US trend.²
- C-SECTION TREND: Montana's cesarean-section rate for singleton births increased significantly in the last decade, from 18% in 1996 to 27% in 2006.²

Objectives

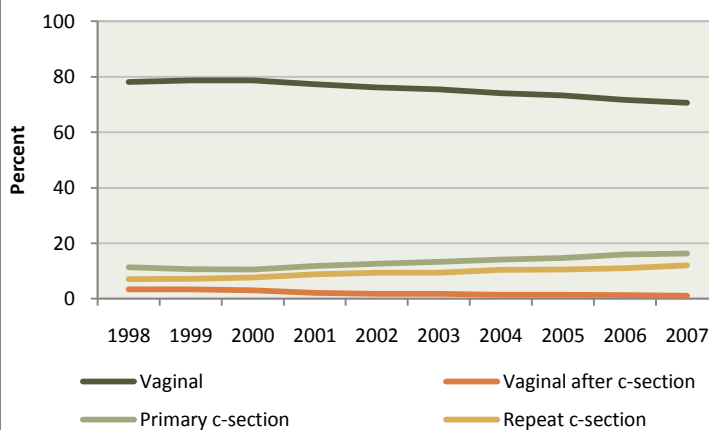
Healthy People 2010

16-9: Reduce cesarean births among low-risk women to 15% for first births and 63% for prior cesarean births.

MONTANA QUICK STATS (2008)¹

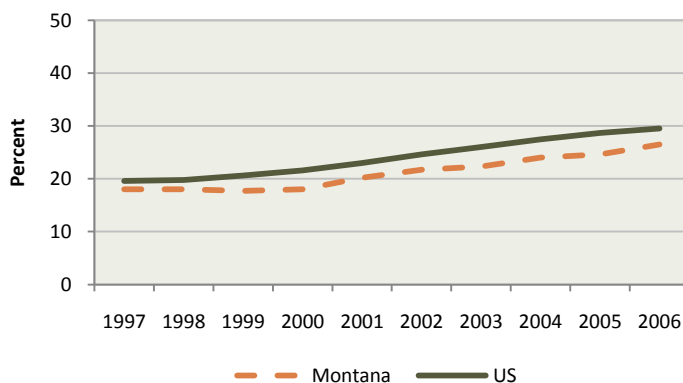
12,595	Number of births
13.0	Live births per 1000 persons (Crude Birth Rate)
28%	C-section rate, singleton live births
<1%	Vaginal birth after c-section (VBAC), singleton births

Figure 1: Method of delivery, Montana, 1998-2007



Source: National Center for Health Statistics.² Includes only singleton live births.

Figure 2: Cesarean delivery rates, Montana and United States, 1997-2006
(Note: scale is not to 100)



Source: National Center for Health Statistics.² Includes only singleton live births.

Labor and Delivery

2010
Montana
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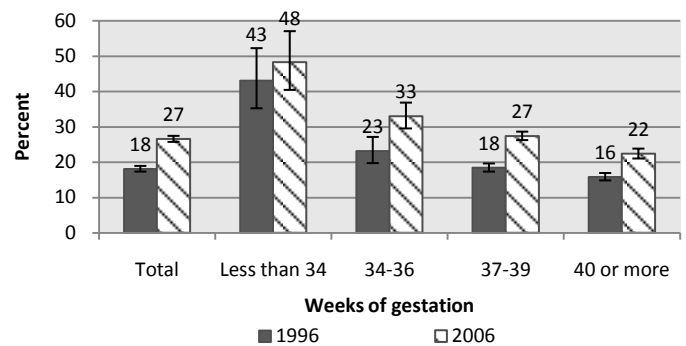
C-SECTIONS

- **RACE:** The rate of c-sections does not differ significantly by race. In 2006, 26% of white women and 28% of American Indian/Alaska Native women in Montana had a c-section for a singleton birth.²
- **AGE:** In 2006, women 35 years of age and over were significantly more likely to have a c-section for a singleton birth than women of younger ages.²
- **GESTATIONAL AGE:** The percent of deliveries by c-section increased significantly between 1996 and 2006 for infants of all gestational ages except those less than 34 weeks.² Although the percent of deliveries by c-section has also increased for infants less than 34 weeks gestation, the change is not significant.

INDUCED LABOR

- **NATIONAL COMPARISON:** Montana's rate of induced labor is significantly higher than the US rate. Both rates have increased over the past decade.²
- **TREND:** Montana's rate of induced labor for singleton births increased significantly in the last decade, from 22% in 1996 to 27% in 2006.²

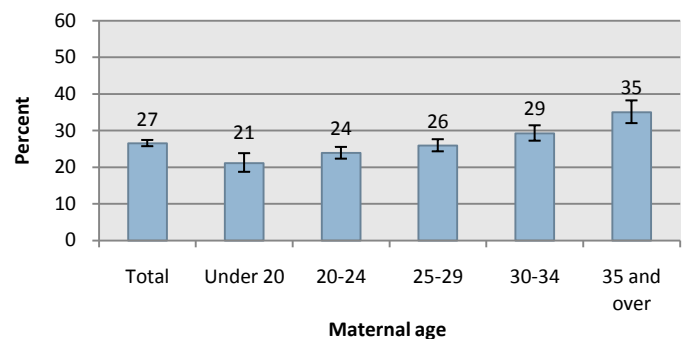
Figure 3: Cesarean delivery rates by gestational age, Montana, 1996 and 2006
(Note: scale is not to 100)



I - Indicates 95% confidence interval.

Source: National Center for Health Statistics.² Includes only singleton live births.

Figure 4: Cesarean delivery rates by age of mother, Montana, 2006
(Note: scale is not to 100)



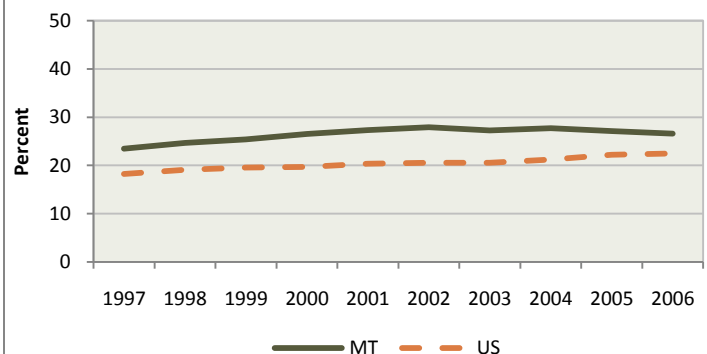
I - Indicates 95% confidence interval.

Source: National Center for Health Statistics.² Includes only singleton live births.

Sources:

1. Montana Department of Public Health and Human Services. Office of Vital Statistics. Birth data files. Analyzed using SAS 9.2.
2. Centers for Disease Control and Prevention. National Center for Health Statistics. VitalStats. Available at: <http://www.cdc.gov/nchs/vitalstats.htm>. Accessed February 18, 2010.
3. Montana Department of Public Health and Human Services. 2010 Maternal and Child Health Needs Assessment Focus Group Reports. Available at: <http://www.dphhs.mt.gov/PHSD/family-health/mchc/phsd-mch-index.shtml>. Accessed February 12, 2010.

Figure 5: Induction of labor rates, Montana and United States 1997-2006
(Note: scale is not to 100)



Source: National Center for Health Statistics.²

Nutrition, Physical Activity, and Obesity

2010
Montana
MCH
Needs Assessment

OVERVIEW

Poor nutrition and physical inactivity are two of the contributing factors to the prevalence of overweight and obesity in children. Overweight and obesity in children can increase the risk for type 2 diabetes and several other chronic health conditions such as asthma, sleep apnea, cardiovascular diseases, and cancer later in life. The body mass index (BMI) is used to measure overweight and obesity. BMI is calculated using weight, height, age, and gender. Using the Centers for Disease Control and Prevention (CDC) growth charts, overweight and obese for children and adolescents 2 through 19 years of age are defined as:

- Overweight: BMI at or above the 85th percentile and lower than the 95th percentile
- Obese: BMI at or above the 95th percentile for children of the same sex and age.¹

STATE AND NATIONAL DATA (2007)³

CHILDREN 10-17 YEARS OF AGE:	MT	US
Overweight:	14%	15%
Obese:	12%	16%

FINDINGS

- TREND:** The prevalence of obesity among Montana high school students increased significantly from 6% [5.2-6.9] in 1999 to 10% [9.0-11.2] in 2007. While the Montana prevalence is lower than the US, obesity among high school students in Montana appears to have increased at a faster rate.⁴
- GENDER:** Data suggest that the overall prevalence of obesity among Montana high school girls is lower than among high school boys.⁴
- WIC:** The prevalence of obesity among WIC participants 2-4 years of age increased from 9% in 1998 to 12% in 2008.⁵
- TV WATCHING:** In 2007, almost half (48%) of Montana children 1-5 years watched more than one hour of television or video during a weekday.³

Objectives

Healthy People 2010

19-3: Reduce the proportion of children and adolescents who are obese to 5%.

MONTANA QUICK STATS (2008)²

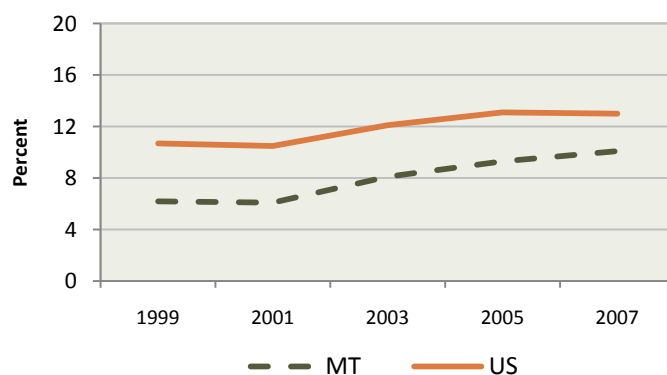
28%

Schools in which students can purchase fruits or vegetables from vending machines or at school store, canteen, or snack bar

55%

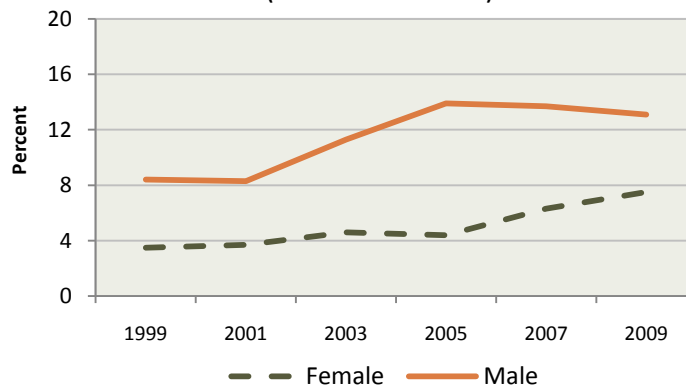
Schools which taught 12 key physical activity topics in a required course

Figure 1: Obesity among high school students, Montana and United States, 1999-2007
(Note: scale is not to 100)



Source: Youth Risk Behavior Survey.⁴

Figure 2: Obesity among high school students, by gender, Montana, 1999-2009
(Note: scale is not to 100)



Source: Youth Risk Behavior Survey.⁴

Nutrition, Physical Activity, and Obesity

2010
Montana
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FOCUS GROUP FINDINGS

Several focus groups were held throughout Montana in 2009 to find out about challenges, concerns, and resources related to maternal and child health issues in the state. Participants included parents of children 0-12 years, teenagers, and parents of children with special health care needs.

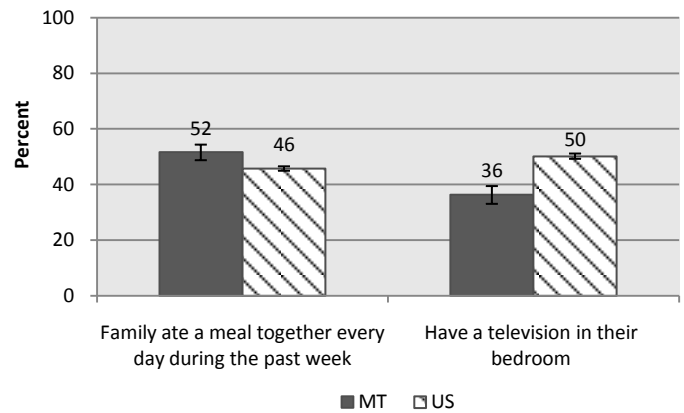
Adolescent focus group participants said...

- Nutrition information is primarily obtained from health classes taught at school, parents/family, and the internet. Very few teens – mostly girls – mentioned looking at nutrition labels on food.⁶
In 2008, 86% of schools required students to take two or more health education courses.²
- Nutrition concerns “go out the window” if it’s something they want to eat.⁶
In 2009, only 18% of youth in Montana ate fruits and vegetables five or more times per day during the past week.⁴
- Television, internet, and video games are a reason teens aren’t as active as they used to be.⁶
In 2009, 18% of Montana high school students played video or computer games for more than three hours per day.⁴
- Driving is a reason teens are less active. Cars are “more convenient than walking or biking”.⁶
The proportion of Montana high school students who met the recommended daily level of physical activity in 2009 was 46%.⁴

Sources:

- Centers for Disease Control and Prevention. Defining Childhood Overweight and Obesity [Web page]. <http://www.cdc.gov/obesity/childhood/defining.html>. Accessed February 26, 2010.
- Montana Office of Public Instruction. Montana School Health Profiles Survey, 2008 [Web page]. <http://www.opi.mt.gov/PDF/shp/MTSummary08.pdf>. Accessed February 17, 2010.
- Child and Adolescent Health Measurement Initiative. 2007 National Survey of Children’s Health. Data Resource Center for Child and Adolescent Health. Available at: <http://www.nschdata.org/Content/Default.aspx>. Accessed February 6, 2010.
- Montana Youth Risk Behavior Surveillance Survey, 1999-2009. Analyzed using SPSS 15.0.
- Centers for Disease Control and Prevention. *Obesity Prevalence Among Low-Income, Preschool-Aged Children – United States, 1998-2008*. MMWR 2009; 58,771. Available at: <http://www.cdc.gov/mmwr/pdf/wk/mm5828.pdf>. Accessed July 13, 2010.
- Montana Department of Health and Human Services. 2010 Maternal and Child Health Needs Assessment Focus Group Reports. Available at: <http://www.cdc.gov/mmwr/pdf/wk/mm5828.pdf>. Accessed February 19, 2010.

Figure 3: Family environment of children 6-17 years, Montana and United States, 2007



I - Indicates 95% confidence interval.

Source: National Survey of Children’s Health.³

Table 1: Dietary behaviors and physical activity of Montana high school students

	2005	2007	2009
Dietary Behaviors			
Ate fruits and vegetables <u>five or more</u> times per day during the past 7 days.	17% [15.7-18.4]	17% [15.6-18.6]	18% [15.7-21.4]
Drank a can, bottle, or glass of soda or pop (not including diet soda or diet pop) <u>one or more</u> times per day during the past 7 days.	*data not collected	26% [24.5-28.1]	26% [23.1-28.4]
Physical Activity			
Met recommended levels of physical activity of at least 60 minutes per day.	31% [29.2-33.2]	45% [41.9-47.9]	46% [42.2-49.9]
Attended physical education classes on <u>one or more</u> days in an average week when they were in school.	58% [52.6-63.5]	54% [49.7-57.9]	58% [52.3-62.9]
Watched TV <u>three or more</u> hours per day on an average school day.	26% [24.1-28.6]	22% [20.4-24.1]	24% [21.5-26.1]
Played video or computer games or used a computer for something that was not school work for <u>three or more</u> hours per day on an average school day.	*data not collected	16% [14.6-17.8]	18% [15.8-20.2]

Source: Youth Risk Behavior Survey.⁴

Unintended Pregnancy

2010
Montana
MCH
Needs Assessment

OVERVIEW

An unintended pregnancy is defined as a pregnancy that either occurs earlier than intended or is unwanted at the time of conception.¹ Pregnancies that are planned may result in better health of the woman at the time of conception, earlier prenatal care, and better pregnancy outcomes for the mother and infant. Understanding the extent and dimensions of unintended pregnancies are important in identifying possible gaps in access to and knowledge of contraceptive methods.

FINDINGS

- **INTENT AT CONCEPTION:** 2002 Montana PRAMS data indicate that 44% of pregnancies that resulted in a live birth were unintended at the time of conception.²
- **AGE:** Women under 25 years of age were significantly more likely to have pregnancies unintended at the time of conception than women 25 and older.²
- **EDUCATION:** Women with more than 12 years of education were significantly less likely to have an unintended pregnancy than women with 12 years or less.²
- **NEED FOR SERVICES:** In 2006, 106,570 Montana women 13-44 years of age were estimated to need contraceptive services*. The number of women considered to need publicly supported contraceptive services and supplies due to a young age (<20) or an income level less than 250% of the federal poverty level was 63,910. Among the women who needed publicly-supported contraceptive services, 56% of the need was met.³
*Need for contraceptive services is defined as being sexually active, able to become pregnant, and are neither intentionally pregnant nor trying to become pregnant.

Objectives

Healthy People 2010

- 9-1: Increase the proportion of births that are intended to 70%.
- 9-3: Increase the proportion of females at risk of unintended pregnancy (and their partners) who use contraception to 100%.

MONTANA QUICK STATS

31.2%

High school students who are currently sexually active (2007)⁴

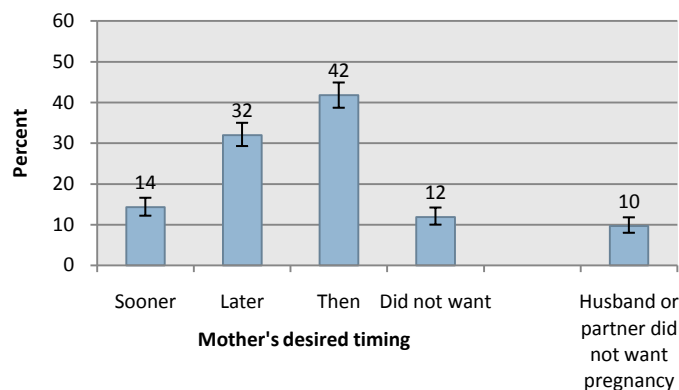
71%

Women 18-44 years of age who want to delay having their next child a year or more or do not want a pregnancy in the future (2008)⁵

77%

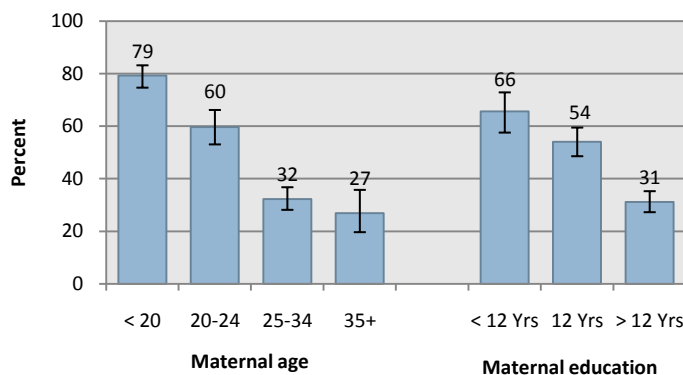
Men who want to delay having their next child a year or more or do not want their partner to be pregnant in the future (2008)⁵

Figure 1: Desired timing of last pregnancy, among women who had a live birth, Montana, 2002
(Note: scale is not to 100)



I - Indicates 95% confidence interval.
Source: CPONDER.²

Figure 2: Unintended pregnancy among women who had a live birth, by age and education, Montana, 2002



I - Indicates 95% confidence interval.
Source: CPONDER.²

Unintended Pregnancy

2010
Montana
MCH
Needs Assessment

ADOLESCENTS⁴

- Although high school girls and boys in Montana report similar rates of ever having had sex (about 46%), Montana high school boys are more likely to report having initiated sex before 13 years of age, while girls are more likely than boys to report being currently sexually active.
- Montana high school boys are more likely than girls to report having drunk alcohol or used drugs prior to their last sexual intercourse.
- Montana high school boys were more likely than girls to report having used condoms during their last sexual intercourse, while girls were more likely to report the use of contraceptive pills when they last had sex (although boys may be less likely to be aware that a female partner is using contraception).

FOCUS GROUP FINDINGS⁶

Several focus groups were held throughout Montana in 2009 to find out about challenges, concerns, and resources related to maternal and child health issues in the state. Participants included parents of children 0-12 years of age, teenagers, and parents of children with special health care needs.

Teen focus group participants said...

- Some factors that lead to teen pregnancy are:
 - Alcohol use
 - A need to receive attention
 - Media that makes it seem like teenage sex is commonplace and no big deal
 - Peers influences/who you hang out with
- Almost all teens could name some form of contraception and said they knew about emergency contraception.
- All of the focus groups mentioned abstinence as a way to prevent pregnancy.
- Clinics and parents were mentioned as the primary sources of information.
- The majority of teens said they know where to go for confidential health care.
- Several teens in all of the focus groups would like more information about preventing pregnancy and sexually transmitted disease.

Figure 3: Smoking before and in last 3 months of pregnancy, by pregnancy intendedness, Montana, 2002

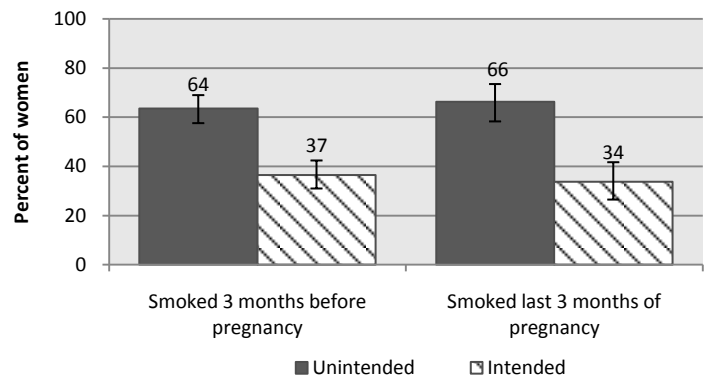
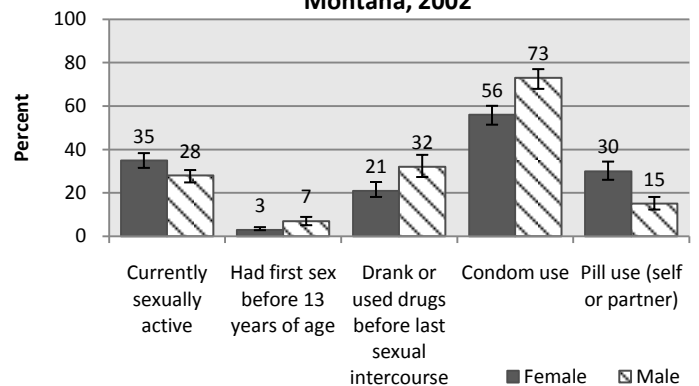


Figure 4: Sexual activity, risk factors, and contraceptive use among high school students, by sex, Montana, 2002



Sources:

- Centers for Disease Control and Prevention. Unintended Pregnancy Prevention: Home [Web page]. Available at: <http://www.cdc.gov/reproductivehealth/UnintendedPregnancy/index.htm>. Accessed February 18, 2010.
- Centers for Disease Control and Prevention. CPONDER. Montana 2002 PRAMS data. Available at: <http://apps.nccd.cdc.gov/cPONDER/>. Accessed February 18, 2010.
- Guttmacher Institute. Contraceptive Needs and Services, 2006. Available at: <http://www.guttmacher.org/pubs/win/allstates2006.pdf>. 2009. Accessed February 18, 2010.
- Centers for Disease Control and Prevention (CDC). 1991-2009 High School Youth Risk Behavior Survey Data. Available at: <http://apps.nccd.cdc.gov/youthonline>. Accessed February 18, 2010.
- Montana Department of Public Health and Human Services. Behavioral Risk Factor Surveillance System (BRFSS), 2008. State data files. Analyzed using SPSS Complex Samples, PASW Statistics 18.
- Montana Department of Public Health and Human Services. 2010 Maternal and Child Health Needs Assessment Focus Group Reports. Available at: <http://www.dphhs.mt.gov/PHSD/family-health/mchc/phsd-mch-index.shtml>. Accessed February 12, 2010.

Access to Care

2010
Montana
MCH
Needs Assessment

OVERVIEW

Availability of and access to comprehensive health services are important to eliminate health disparities and improve the quality of life. Preventive services, such as immunizations, and emergency services to treat life-threatening events, such as trauma from motor vehicle crashes, can substantially improve the outcomes of unexpected and chronic health conditions. Access to care often depends on an individual's health insurance status and the services provided in an area, as well as a multitude of other social and individual factors.

STATE AND NATIONAL DATA (2008)¹

	MT	US
Uninsured children aged 0-19:	12%	11%
Uninsured women aged 15-44:	21%	21%

FINDINGS

- **INSURANCE COVERAGE:** The prevalence of uninsured women of childbearing age (15-44 years of age) in Montana increased significantly from 20% [19.3-19.7] in 2005 to 21% [20.4-20.7] in 2008.¹ However, the prevalence of uninsured children 0-19 years decreased significantly from 14% [14.3-14.5] in 2005 to 12% [11.8-12.1] in 2008.¹
- **HEALTH STATUS:** The prevalence of Montana children in excellent or very good health decreased from 90% in 2003 to 88% in 2007.³ Similarly, the prevalence of Montana women 18-44 years of age in excellent or very good health declined from 65% in 2002 to 63% in 2008.⁴
- **PREVENTIVE SERVICES:** In 2007, Montana children 6-11 years were significantly less likely to obtain both preventative medical and dental care visits compared to children in the same age group nationwide.³

Objectives

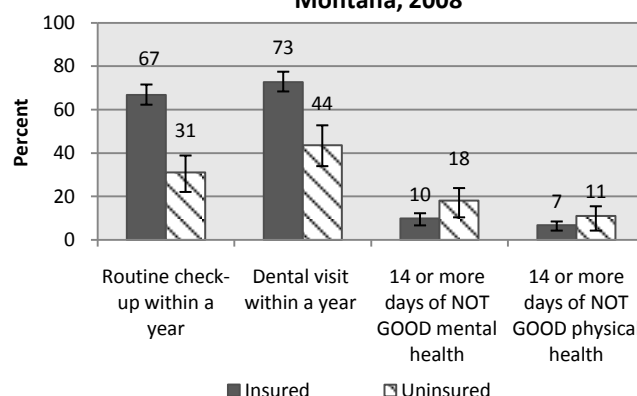
Healthy People 2010

- 1-1: Increase the proportion of persons with health insurance to 100%.
- 1-5: Increase the proportion of persons with a usual primary care provider to 85%.

MONTANA QUICK STATS

45	Critical care access hospitals (2010) ²
17	Hospitals (2010) ²
46	Rural health clinics (2009) ²
37	Federally qualified health centers (2009) ²
2,353	Licensed physicians (2009) ²

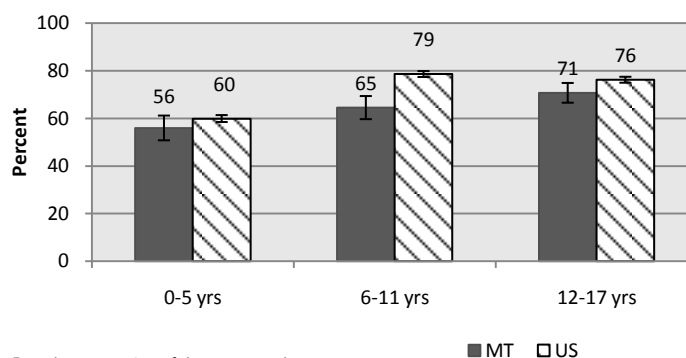
Figure 1: Medical and dental visits and physical and mental health status among women 18-44 years, by insurance status, Montana, 2008



I - Indicates 95% confidence interval.

Source: Montana Behavioral Risk Factor Surveillance System.⁴

Figure 2: Received both preventive medical and dental care visits in the past 12 months, children 0-17 years, by age group, Montana and United States, 2007



I - Indicates 95% confidence interval.

Source: National Survey of Children's Health.³

Access to Care

2010
Montana
MCH
Needs Assessment

FOCUS GROUP FINDINGS

Several focus groups were held throughout Montana in 2009 to find out about challenges, concerns, and resources related to maternal and child health issues in the state. Participants included parents of children 0-12 years, teenagers, and parents of children with special health care needs.

Parents of children 0-12 years – particularly those in rural and reservation locations – mentioned the following concerns about health care access:

1. Limited number of care providers who accept Medicaid.⁵
During 2008, 27% of Montana children 0-17 years and 14% of women of childbearing age (15-44 years) were covered by Medicaid.¹
2. Finding specialist care and services.⁵
In 2007, 6% of Montana children 0-17 years received or needed specialist care in the past year and had a problem getting it.³
3. Quality of providers.⁵
During 2007, 34% of children in Montana who needed effective care coordination (such as help coordinating care, communication between doctors, or communication between doctors and schools) did not receive it.³

Sources:

1. U.S. Census Bureau. Current Population Survey (CPS) Table Creator II. Available at: http://www.census.gov/hhes/www/cpstc/apm/cpstc_altpov.html. Accessed February 4, 2010.
2. Montana Department of Public Health and Human Services. Primary Care Office, 2009 and 2010.
3. Child and Adolescent Health Measurement Initiative. 2007 National Survey of Children's Health. Data Resource Center for Child and Adolescent Health. Available at: <http://www.nschdata.org/DataQuery/DataQueryResults.aspx>. Accessed February 5, 2010.
4. Montana Department of Public Health and Human Services. Behavioral Risk Factor Surveillance System (BRFSS), 2008. State data files. Analyzed using SPSS 15.0.
5. Montana Department of Public Health and Human Services. 2010 Maternal and Child Health Needs Assessment Focus Group Reports. Available at <http://www.dphhs.mt.gov/PHSD/family-health/mchc/phsd-mch-index.shtml>. Accessed February 6, 2010.

Map 1:

Primary Care Health Professional Shortage Areas, Montana 2009

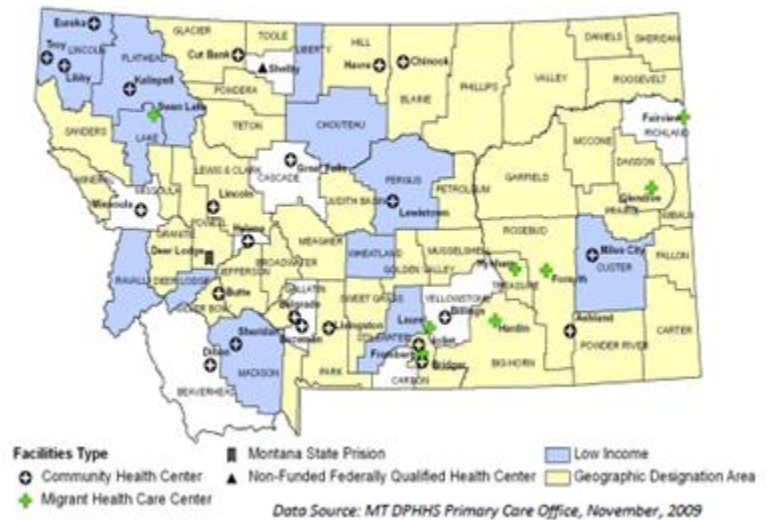
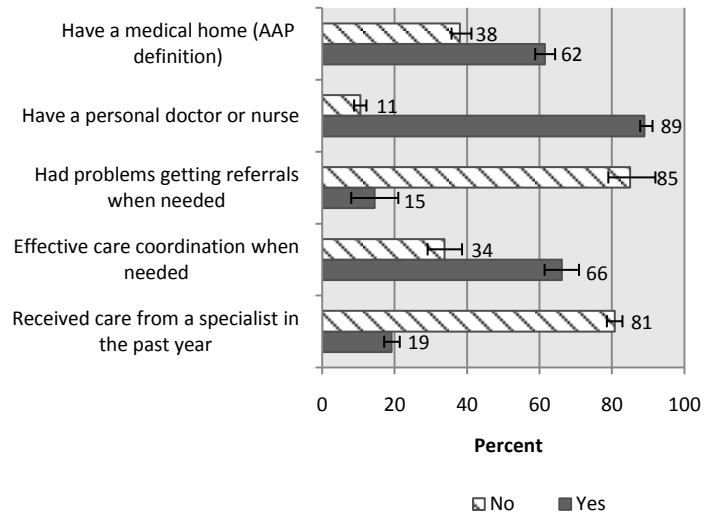


Figure 3: Health care access and quality among children 0-17 years, Montana, 2007



I - Indicates 95% confidence interval.
Source: National Survey of Children's Health.³

Child Safety/Unintentional Injury

2010
Montana
MCH
Needs Assessment

OVERVIEW

Unintentional injury deaths are a leading cause of death for children of all ages in Montana. The greatest proportion of unintentional injury deaths are related to motor vehicle incidents. Because the causes of death for infants are often different than those for older children, the data focus on children older than 1 year when available.

STATE AND NATIONAL DATA (2004-2006)²

CHILD (0-17 YEARS) MORTALITY RATES PER 100,000 CHILDREN:

	MT	US
Overall:	62.6	62.4
Unintentional injury:	15.5	11.2
Motor vehicle traffic fatalities:	8.7	5.7

FINDINGS

- PROPORTION: Unintentional injury deaths are the cause of approximately 47% of child (1-17 years of age) deaths in Montana.¹
- AGE: The number and proportion of deaths due to unintentional injuries increases greatly by age. In 2004-2008, 38% of deaths to children 1-4 years were due to unintentional injuries, compared to 57% of deaths to children 15-17.¹
- MOTOR VEHICLE-RELATED DEATHS: In 2004-2008 motor vehicle-related deaths made up 69% of unintentional injury deaths to children 1-17.¹
- DROWNING: Drowning is the second most common cause of unintentional injury deaths among children 1-17, accounting for 10% of the deaths in 2004-2008.¹
- DRINKING AND DRIVING: Montana teens are significantly more likely than US teens to report driving a car when they have been drinking alcohol.³
- SEATBELT USE: Montana high school boys are significantly more likely than girls to rarely or never wear a seatbelt when riding in a car driven by someone else.³

Objectives

Healthy People 2010

15-3: Reduce deaths caused by unintentional injuries to 17.5 per 100,000 population.

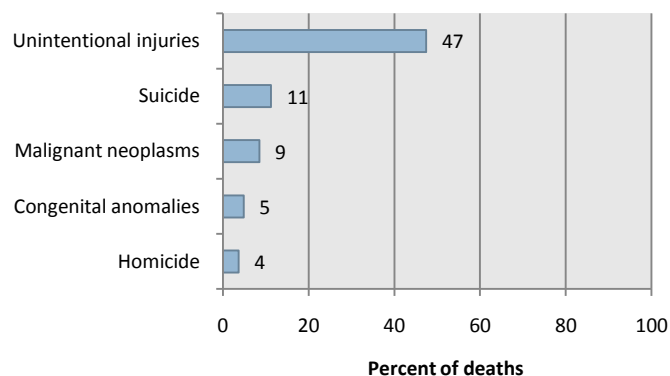
15-15: Reduce deaths caused by motor vehicle crashes to 9.2 per 100,000 population.

MONTANA QUICK STATS (2008)¹

CHILDREN 1-17 YEARS

36	Unintentional injury deaths
24	Motor vehicle deaths

**Figure 1: Major causes of child death
Montana residents 1-17 years of age,
Montana, 2004-2008**



Source: Office of Vital Statistics.¹

**Table 1: Leading causes of unintentional injury deaths among
Montana residents 1-17 years of age, by age group,
Montana, 2004-2006**

Rank	1-4	5-9	10-14	15-17
1	Motor vehicle/ Transport	Motor vehicle/ Transport	Motor vehicle/ Transport	Motor vehicle/ Transport
2	Drowning	Drowning and Fire/Burn	Drowning	Poisoning
3	Fall and Natural/ Environment	-	Poisoning and Fire/Burn and Firearm	Drowning and Electrocution

Source: Office of Vital Statistics.¹

Child Safety/Unintentional Injury

2010
Montana
MCH
Needs Assessment

LOCAL FETAL, INFANT, CHILD MORTALITY REVIEW (FICMR) TEAM FINDINGS

Local child mortality review teams reviewed 51 (79%) of the unintentional injury deaths reported in Montana or to Montana residents 1-17 years of age in 2005-2006. The teams' findings include:⁴

- Ninety-four percent of the reviewed unintentional injury deaths to children were preventable*.
- Ninety-four percent of the reviewed motor vehicle deaths were preventable.
- Factors that contributed to the preventable motor vehicle deaths include alcohol and drug use, lack of seat belt and child safety seat use, inattentive and reckless driving, and driver inexperience.
- In 66% of the passenger vehicle deaths reviewed, a seat belt or infant/toddler seat was not used or was used incorrectly.
- Factors that contributed to the reviewed drowning deaths include a lack of adult supervision and a lack of fencing between houses and bodies of water.

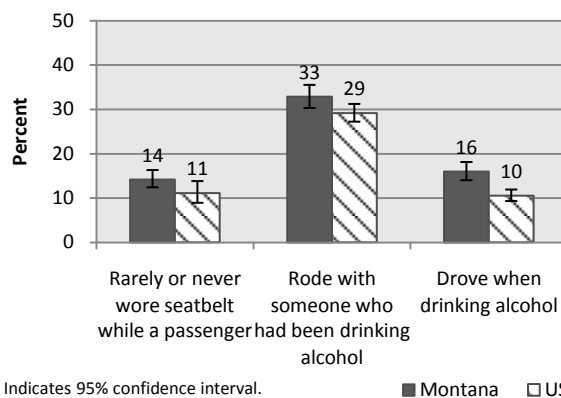
* A death is considered preventable if an individual or the community could reasonably have done something that would have changed the circumstances that led to the child's death.

Sources:

1. Montana Department of Public Health and Human Services. Office of Vital Statistics. Mortality data files. Analyzed using SAS 9.2.
2. Centers for Disease Control and Prevention. National Center for Health Statistics. Health Data Interactive. Available at: www.cdc.gov/nchs/hdi.htm. Accessed February 16, 2010
3. Centers for Disease Control and Prevention (CDC). 1991-2009 High School Youth Risk Behavior Survey Data. Available at: <http://apps.nccd.cdc.gov/youthonline>. Accessed February 18, 2010.
4. Montana Department of Public Health and Human Services. Fetal, Infant, and Child Mortality Review Data. 2005-2006 Reviews. Analyzed using SPSS 15.0.
5. Montana Department of Public Health and Human Services. 2010 Maternal and Child Health Needs Assessment Focus Group Reports. Available at: <http://www.dphhs.mt.gov/PHSD/family-health/mchc/phsd-mch-index.shtml>. Accessed February 12, 2010.

Figure 2: High school youth who report risk factors related to motor vehicle fatalities, Montana and United States, 2007

(Note: scale is not to 100)



FOCUS GROUP FINDINGS⁵

Several focus groups were held throughout Montana in 2009 to find out about challenges, concerns, and resources related to maternal and child health issues in the state. Participants included parents of children 0-12 years of age, teenagers, and parents of children with special health care needs.

- Parents of children 0-12 mentioned a lack of safe, affordable activities for young children as a concern.
- Teens who participated in focus groups cited drinking, distractions and reckless driving as primary causes of car crashes.
- More than half of the teen focus group participants, except those in Billings, only wear a seat belt if they are on the highway. Billings participants reported wearing seatbelts except when driving in rural areas.
- To prevent car crashes, teen participants suggested making it more difficult to get a driver's license by requiring more driver education time and imposing stricter testing. Raising insurance rates or the age of eligibility for a driver's license were also mentioned as prevention strategies.

Immunization

2010
Montana
MCH
Needs Assessment

OVERVIEW

Maintaining high levels of immunization (vaccination) coverage in early childhood is one of the most effective methods to prevent the spread of certain communicable diseases. The recommended immunization schedule for children 19-35 months of age includes 4 doses of diphtheria, tetanus, pertussis (4DTaP), 3 doses of polio (3Polio), 1 dose of measles, mumps and rubella (MMR), 3 doses of haemophilus influenzae type b (Hib), and 3 doses of Hepatitis B (HepB). This is referred to as the 4:3:1:3:3 series. The 4:3:1:3:3:1 series includes all the previously listed immunizations, plus 1 dose of varicella.

STATE AND NATIONAL DATA (2008)¹

CHILDREN 19-35 MONTHS OF AGE:	MT	US
Immunized with 4:3:1:3:3 series:	66%	78%
Immunized with 4:3:1:3:3:1 series:	59%	76%

FINDINGS

- NATIONAL COMPARISON:** In 2008, the coverage rate for the 4:3:1:3:3 immunization series among Montana children 19 to 35 months of age was significantly lower (65.5% \pm 6.6) than the national rate (78.2% \pm 1.1). The same year, 77.7% (\pm 6.0) of Montana children 19-35 months had received one dose of varicella, compared to 90.7% (\pm 0.7) of US children.³
- TREND:** Since 2005, the immunization rates for the 4:3:1:3:3 series appear to be declining for Montana children 19-35 months of age.³
- DTaP:** Since before 2000, the immunization coverage rate for all 4 DTaP doses has consistently been the lowest among all the vaccinations in the 4:3:1:3:3 series for Montana children 19-35 months of age. The DTaP coverage rate has declined in recent years and is particularly low for the 4th dose. In 2008, the percent of Montana children 19-35 months who had received three of the 4 DTaP doses was 92.3 (\pm 4.1), whereas only 74.4% (\pm 6.2) had received all four doses.³
- VARICELLA:** Montana has one of the lowest rates of varicella coverage in the US and the rate does not appear to be increasing in recent years.³

Objective Healthy People 2010

14-24a: Increase the proportion of children 19 to 35 months of age who receive the recommended vaccines 4:3:1:3:3 (4DTaP, 3 polio, 1 MMR, 3 Hib, 3 hep B) to 80%.

MONTANA QUICK STATS (2008)

66%

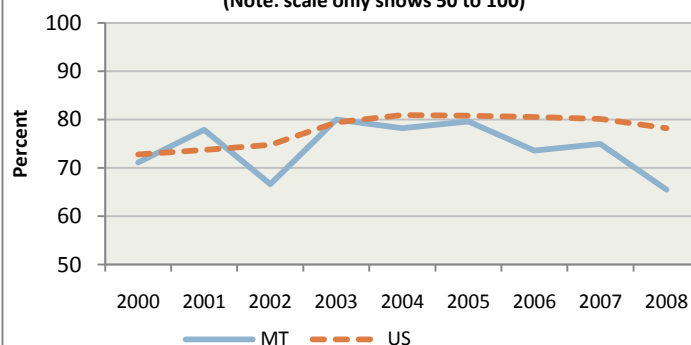
Vaccination coverage for Hepatitis B, birth to 3 days¹

State childcare and school immunization requirements:²

Childcare: DTaP, Hib, MMR, Polio, Varicella
Kindergarten: DTaP, MMR, Measles dose 2, Polio

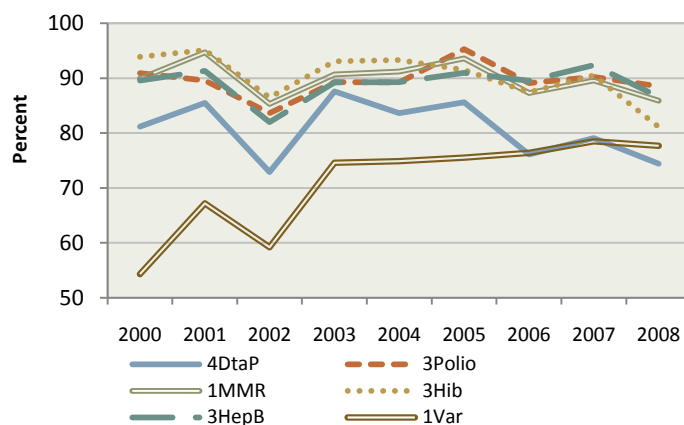
Middle school: Measles dose 2, Td or Tdap

Figure 1: Estimated coverage of children 19-35 months of age immunized with 4:3:1:3:3 series, Montana and United States, 2000-2008
(Note: scale only shows 50 to 100)



Source: National Immunization Survey.³

Figure 2: Estimated coverage of children 19-35 months, by vaccines included in the 4:3:1:3:3 series, Montana, 2000-2008
(Note: scale only shows 50 to 100)



Source: National Immunization Survey.³

Immunization

IMMUNIZATION — SCHOOL-AGED CHILDREN

During the 2008-2009 school year, most Montana school children met the State's vaccination school-entry requirement for public schools.

Table 1: Immunization coverage among children entering public schools, Montana, 2008-2009 school year

	Kindergarten	Middle School
4DTaP (diphtheria, tetanus, pertussis)	97%	NR
Polio	98%	NR
MMR (measles, mumps, rubella)	97%	98%
Td or Tdap	NR	97%
NR= not required Data represents vaccination rates as of December 31 st 2008. Source: School Immunization Assessment Survey. ⁴		

ADOLESCENTS

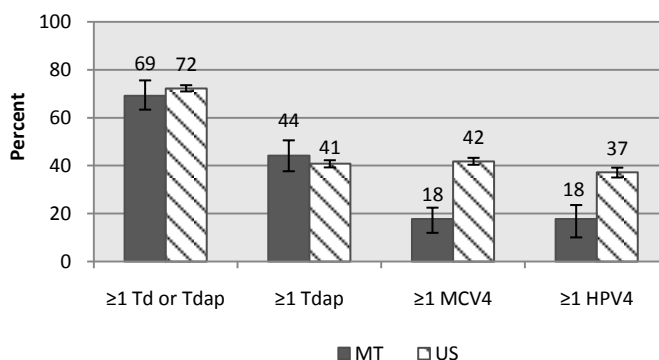
In 2009, the Advisory Committee on Immunization Practices (ACIP) recommended three new vaccines for adolescents: the tetanus, diphtheria, acellular pertussis vaccine (Tdap; one dose); meningococcal conjugate vaccine (MCV4; one dose); and (for girls) quadrivalent human papillomavirus vaccine (HPV4; three doses).⁵ In 2008, the coverage rates for Montana adolescents varied from the national rates by the type of vaccine administered:

- An estimated 44% (50.7-37.8) of Montana adolescents 13-17 years of age received the Tdap vaccination compared to 41% (42.3-39.3) nationwide.⁶
- Montana adolescents 13-17 years of age are significantly less likely than US adolescents to have received the MCV4 and HPV4 vaccines.⁶

The ACIP also recommends that adolescents receive the appropriate vaccinations missed during childhood, which include: measles, mumps, rubella vaccine (MMR; 2 doses); hepatitis B vaccine (HepB; 3 doses); and varicella vaccine (VAR; 2 doses).⁶

- In 2008, Montana adolescents 13-17 years of age were significantly less likely than US adolescents to receive the MMR, HepB and VAR vaccines.⁶

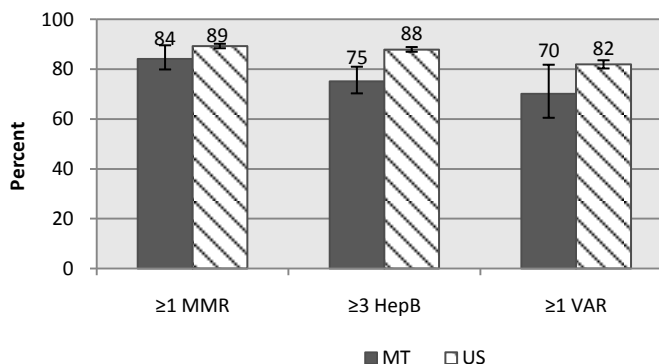
Figure 3: Estimated coverage of vaccines routinely recommended for adolescents 13-17 years of age, by selected vaccines, Montana and United States, 2008



I - Indicates 95% confidence interval.

Source: National Immunization Survey.⁶

Figure 4: Estimated coverage of vaccines routinely recommended during childhood (adolescent catch-up vaccines), adolescents 13-17 years of age, by selected vaccines, Montana and United States, 2008



I - Indicates 95% confidence interval.

Source: National Immunization Survey.⁶

Sources:

- Centers for Disease Control and Prevention. National Center for Immunization and Respiratory Diseases. Vaccines & Immunization. Statistics and Surveillance: 2008 Table Data. Available at: http://www.cdc.gov/vaccines/stats-surv/nis/data/tables_2008.htm. Accessed March 11, 2010.
- Centers for Disease Control and Prevention. National Center for Immunization and Respiratory Diseases. Childcare and School Vaccination Requirements [Web page]. Available at: <http://www2a.cdc.gov/nip/schoolsurv/CombinedLaws2007.pdf>. Accessed March 15, 2010.
- Centers for Disease Control and Prevention. National Center for Immunization and Respiratory Diseases. Immunization Coverage in the U.S. NIS- Children (19-35 months). NIS Data: Tables, Articles, & Figures. 2000 to 2008 Table Data. Available at: <http://www.cdc.gov/vaccines/stats-surv/imz-coverage.htm>. Accessed March 12, 2010.
- Centers for Disease Control and Prevention. National Center for Immunization and Respiratory Diseases. School Vaccination Coverage Reports. School Immunization Assessment Survey for Kindergarten and Middle School, School Year 2008-09. Available at: <http://www2.cdc.gov/nip/schoolsurv/schoolrpt1.asp?st1=822560>. Accessed March 15, 2010.
- Centers for Disease Control and Prevention. Recommended Immunization Schedules for Persons Aged 0 through 18 years—United States, 2009. [published corrections in MMWR Erratum: 2009, 57(53):1419]. MMWR, 2008;57(51&52). Available at: <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5751a5.htm>. Accessed March 15, 2010.
- Centers for Disease Control and Prevention. National Center for Immunization and Respiratory Diseases. Vaccines & Immunization. Statistics and Surveillance: 2008 NIS- Teen Table Data. Available at: http://www.cdc.gov/vaccines/stats-surv/nisteen/data/tables_2008.htm#overall. Accessed March 12, 2010.

Oral Health

2010
Montana
MCH
Needs Assessment

OVERVIEW

Tooth decay (dental cavities or dental caries) is a chronic disease caused by bacterial infection, and is more common than asthma or hay fever. If left untreated, tooth decay can affect a child's growth and development, sleep, nutrition, speech, self-esteem, and school attendance. Since the tooth decay can begin shortly after the eruption of the first tooth, early prevention is essential.

STATE AND NATIONAL DATA (2007)³

	MT	US
Unmet need for dental care:	5%	3%
Toothache within the past 6 months:	12%	11%

FINDINGS

- CONDITION OF TEETH: Seventy-five percent of Montana children 1-17 years of age had teeth in excellent or very good condition in 2007.³
- NATIONAL COMPARISON: In 2007, Montana had a higher rate than the US in overall unmet need for dental care for children 0-17 years of age.³
- INCOME: Montana children from lower-income communities are significantly more likely to have untreated dental cavities, dental caries experience, and need urgent dental treatment than children from higher-income communities. Also, children from lower-income communities have fewer dental sealants than children from higher-income communities.⁴
- ORAL HEALTH TREATMENT: During the 2005-2006 school year, 29% of Montana third grade students had at least one untreated dental cavity. Less than half (46%) of third grade students had dental sealants.⁴
- HEAD START: Almost 39% of Montana children enrolled in Head Start during the 2005-2006 school year had untreated cavities.⁴

Objectives

Healthy People 2010

- 21-2b: Reduce the proportion of children with untreated dental decay in primary and permanent teeth to 21%.
- 21-8: Increase the proportion of children who have received dental sealants on their molar teeth to 50%.

MONTANA QUICK STATS

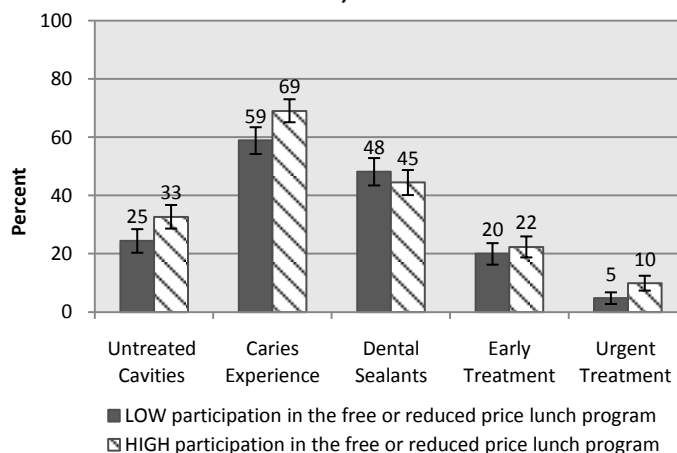
599	Active licensed dentists in the state (2009) ¹
374	Dentists enrolled in Medicaid (2008) ²
346	Dentists enrolled in Children's Health Insurance Plan (CHIP) (2008) ²

Table 1: Condition of teeth among Montana children 1-17 years

Condition of Teeth	2007	2003
Excellent/very good	75% [71.8-77.1]	72% [69.1-74.1]
Good	18% [15.6-20.2]	21% [18.4-22.9]
Fair/poor	8% [5.8-9.4]	8% [6.2-9.3]

Source: National Survey of Children's Health.³

Figure 1: Oral health status of third grade children, by level of school participation in the free or reduced price lunch program, Montana, 2005 - 2006



Source: Montana '05-'06 Study of Oral Health Needs; 3rd Graders and Head Start Children.⁴

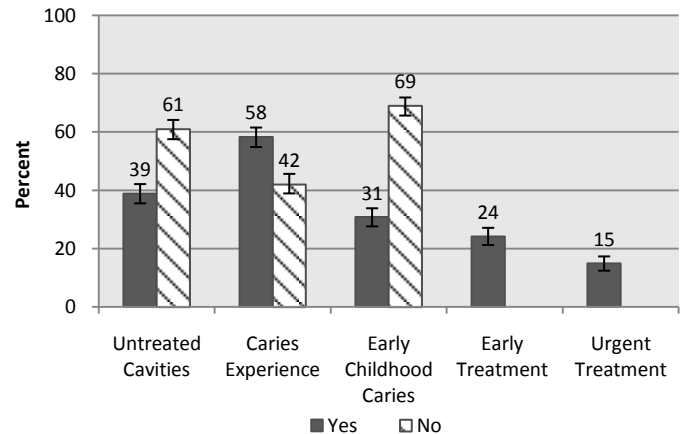
Oral Health

- **PREVENTIVE VISITS:** Almost half (49%) of Montana children 5 years of age and younger did not receive preventive dental care such as check-ups and dental cleanings during 2007.³
- **MEDICAID CLIENTS:** In 2007, only 28% of Montana children 5 and younger who were enrolled in Medicaid received dental services as part of their comprehensive services.⁵
- **INSURANCE COVERAGE:** Similar to the US, children 1-17 years in Montana who are covered by public or private health insurance are more likely to have a dental visit than uninsured children.³
- **INSURANCE TYPE:** In 2007, Montana children with private insurance were significantly more likely to receive one or more preventive dental care visits than children with public health insurance.³

Sources:

1. Montana Department of Public Health and Human Services, Office of Primary Care, 2009.
2. Paulsen J. Montana Department of Public Health and Human Services, Acute Services Bureau. Written communication, January 8, 2010; Arnold B. Montana Children's Health Insurance Plan. Written communication, January 11, 2010.
3. Child and Adolescent Health Measurement Initiative. 2007 National Survey of Children's Health. Data Resource Center for Child and Adolescent Health website. Available at: <http://www.nschedata.org/DataQuery/DataQueryResults.aspx>. Accessed January 20, 2010.
4. Montana Department of Public Health and Human Services. Montana 2005-2006 Study of Oral Health Needs: 3rd Graders and Head Start Children.
5. Center for Medicare and Medicaid Services. Annual EPSDT Participation Reports. Montana 2007.

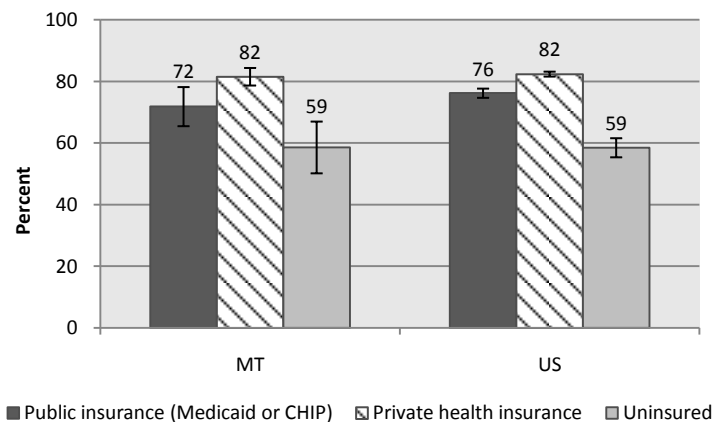
Figure 2: Oral health status of children enrolled in Head Start, Montana, 2005 - 2006



I - Indicates 95% confidence interval.

Source: Montana '05-'06 Study of Oral Health Needs; 3rd Graders and Head Start Children.⁴

Figure 3: Children 1-17 years with at least one preventive dental visit during the past 12 months, by type of insurance, Montana and United States, 2007



I - Indicates 95% confidence interval.

Source: National Survey of Children's Health.³

Preconception Health

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OVERVIEW

The preconception health of women of childbearing age can affect their ability to become pregnant, their health during pregnancy, the pregnancy outcome, and their health as a parent. Women of childbearing age (WCBA) are generally defined as 15 through 44 years of age. Although women may give birth at younger or older ages, the majority of births occur to women in this age range.

STATE AND NATIONAL DATA (2008)¹

WOMEN OF CHILDBEARING AGE:	MT	US
<i>Below 200% of the federal poverty level:</i>	39%	35%
<i>White:</i>	86%	77%
<i>American Indian/Alaska Native:</i>	8%	1%

FINDINGS

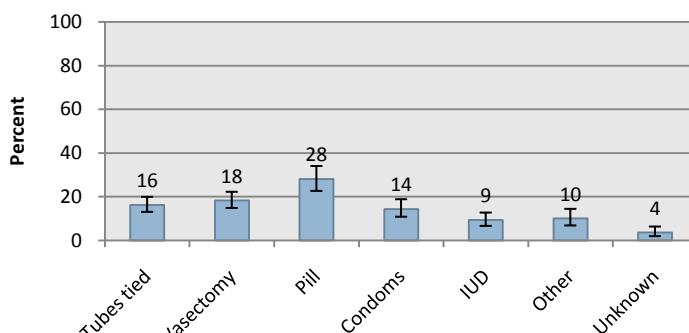
- CONTRACEPTIVE METHODS:** Among women 18-44 years of age, permanent contraceptive methods, such as tubal ligations and vasectomies, are the most common (35%), followed by hormonal methods like the pill, shots, and contraceptive patch (32%).²
- AGE:** Women 18-30 years of age are significantly less likely than women 30-44 to have some sort of health care coverage or to have had a dental cleaning within the past year, although they are more likely to have had a Pap smear within the last 3 years.²
- RACE:** American Indian women ages 18-44 are significantly more likely to smoke, be obese, be diagnosed with diabetes, and have received a flu vaccine in the last year than white women.²
- INCOME:** Women 18-44 with incomes under \$25,000 are significantly more likely to be obese, smoke, and have poor mental health than women 18-44 with incomes of \$25,000 or more. Lower income women are less likely to have health care coverage and to have had a routine checkup with a doctor in the past year.²
- HEALTH CARE COSTS:** Twenty-nine percent of women 18-44 years who hadn't had a Pap smear said it was because of the cost.² The most common reason for women 18-44 to be without health care coverage is the cost of the premiums.²
- SOURCE OF HEALTH CARE:** Over 50% of women 18-44 noted the doctor's office as the place they go when they are sick or need advice about their health. Twenty percent go to a public health clinic or community health center (CHC).²

MONTANA QUICK STATS

WOMEN OF CHILDBEARING AGE

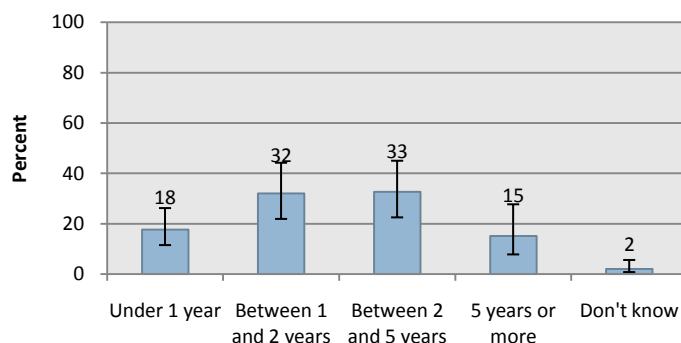
- 19%** Of Montana's total population (2008)¹
- 66%** Employed for wages or self-employed (2008)¹
- 20%** Income below 100% of the federal poverty level (2008)¹
- 37%** Currently pregnant or want to have a child sometime in the future (2008)²

Figure 1: Type of contraceptive method, women 18-44 years of age, Montana, 2008



I - Indicates 95% confidence interval.
Source: Behavioral Risk Factor Surveillance System (BRFSS).²

Figure 2: Desired timing of next pregnancy, women 18-44 years of age who desire a future pregnancy, Montana, 2008



I - Indicates 95% confidence interval.
Source: Behavioral Risk Factor Surveillance System (BRFSS).²

Preconception Health

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Table 1: Preconception Health Indicators
Montana Women of Childbearing Age

	2008 Total	Women < 30*	American Indian/Alaska Native*	Income <\$25,000*
GENERAL HEALTH^{2^A}				
Self-reported general health is excellent, very good, or good	92.3% (89.9-94.2)	94.2% (89.2-96.9)	84.7% (72.8-91.9)	84.4% (76.6-89.9)↓
SOCIAL DETERMINANTS OF HEALTH				
Completed the 12th grade or received a GED ^{2^A}	93.5% (91.0-95.4)	89.9% (84.3-93.7)	77.7% (64.1-87.2)↓	89.1% (82.6-93.4)
Family income at or below 200% of the Federal Poverty Level ¹	39.3%	45.6%	71.7%	-
HEALTH CARE^{2^A}				
Currently have some type of health care coverage	75.0% (70.8-78.9)	66.3% (57.8-74.9)↓	61.2% (47.0-73.7)	47.4% (37.9-57.1)↓
Visited a doctor for a routine check-up within the past year	58.0% (53.5-62.4)	55.0% (46.3-63.3)	71.3% (58.5-81.4)	46.2% (36.8-55.9)↓
Dental cleaning within last year	68.2% (63.1-72.9)	60.3% (50.4-69.5)↓	58.3% (42.8-72.4)	53.0% (41.3-64.4)↓
Had a Pap smear within the previous 3 years	89.1% (86.4-91.3)	94.0% (89.1-96.8)↑	81.8% (79.2-97.1)	83.9% (76.4-89.4)
REPRODUCTIVE HEALTH AND FAMILY PLANNING				
Previous preterm birth ³	1.2% (1.0-1.3)	1.0% (0.8-1.2)	0.9% (0.6-1.5)	-
Currently doing something to keep from getting pregnant ^{2^A}	80.7% (76.2-84.5)	80.5% (71.2-87.3)	73.3% (52.9-87.1)	73.5% (61.6-82.7)
TOBACCO, ALCOHOL, AND SUBSTANCE USE^{2^A}				
Smoked ≥100 cigarettes in lifetime and currently smoke every day or some days	22.3% (18.9-26.2)	24.2% (17.8-31.8)	40.7% (27.7-55.1)↑	43.2% (34.0-53.0)↑
Average of more than 1 drink per day on the days they drank alcohol	31.2% (27.1-35.7)	30.5% (23.0-39.3)	27.2% (17.6-39.6)	35.1% (26.4-44.9)
NUTRITION AND PHYSICAL ACTIVITY^{2^A}				
Overweight	24.8% (21.3-28.6)	23.0% (17.2-30.0)	29.6% (18.8-43.4)	23.8% (16.8-32.5)
Obese	23.4% (19.6-27.7)	24.6% (17.7-33.1)	50.8% (36.6-64.8)↑	41.9% (32.4-52.1)↑
MENTAL HEALTH^{2^A}				
Not good mental health for 14 or more days in the past month	12.1% (9.7-15.1)	11.0% (6.9-17.0)	15.5% (7.2-30.3)	21.7% (15.2-29.9)↑
EMOTIONAL AND SOCIAL SUPPORT^{2^A}				
Usually or always received the social and emotional support they need	86.1% (83.0-88.8)	86.8% (80.5-91.3)	77.7% (64.7-86.9)	74.5% (65.6-81.7)↓
CHRONIC CONDITIONS^{2^A}				
Ever diagnosed with diabetes (including gestational)	5.9% (4.3-8.0)	3.5% (1.7-7.0)	22.5% (10.9-40.8)↑	5.9% (2.8-11.8)
Currently have asthma	12.1% (9.3-15.6)	11.3% (6.6-18.6)	14.8% (7.2-28.0)	13.9% (8.5-21.8)
IMMUNIZATIONS^{2^A}				
Received an influenza vaccine in the last 12 months	30.1% (26.0-34.6)	28.4% (21.0-37.2)	52.6% (39.1-65.8)↑	23.5% (16.5-32.4)

*Bold text indicates that prevalence estimate is statistically significantly different (based on 95% confidence intervals) than the comparison group (women over 30, white women, or women with incomes of \$25,000 or higher). The arrow indicates whether the prevalence estimate is significantly higher or lower than the comparison group. Education is not compared for significance by age, since younger women have not had as much time to complete their education as older women.

^A Montana Behavioral Risk Factor Surveillance System (BRFSS) Data. Includes women 18-44. Non-BRFSS measures include women 15-44 years of age.

Sources:

1. U.S. Census Bureau. Current Population Survey (CPS) Table Creator. Available at: http://www.census.gov/hhes/www/cpstc/cps_table_creator.html. Accessed February 11, 2010.
2. Montana Department of Public Health and Human Services. Behavioral Risk Factor Surveillance System (BRFSS), 2008. State data files. Analyzed using SPSS Complex Samples, PASW Statistics 18.
3. Montana Department of Public Health and Human Services. Office of Vital Statistics. Birth data files. Analyzed using SAS 9.2.

Smoking During Pregnancy

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OVERVIEW

Smoking before, during, and after pregnancy can result in health consequences for the woman and infant. Smoking can affect a woman's fertility, and infants born to moms who smoke have an increased risk of premature birth, low birth weight, and Sudden Infant Death Syndrome (SIDS).¹

STATE AND NATIONAL DATA (2006)^{5*}

TOBACCO USE DURING PREGNANCY:	MT	US*
Overall:	18%	10%
Women under 25:	25%	15%
American Indian /Alaska Native women:	27%	17%

*Due to changes in the way smoking during pregnancy is reported, states using the 2003 US Standard Certificate of Live Birth in 2006 are not included in the US calculations.

FINDINGS

- **TREND:** The prevalence of smoking during pregnancy in Montana has not declined over the past decade. In both 1999 and 2007, 17% of women reported smoking during pregnancy.³ (Due to changes in data collection methods, 2008 rates are not comparable to 1999).
- **AGE:** Montana women under 25 are significantly more likely to smoke than women 25 years of age and older.³
- **RACE:** American Indian women 25 years of age and older in Montana are significantly more likely to smoke during pregnancy than white women of the same ages, and the rates of smoking by age do not decline among American Indian women as they do among white women.³
- **RISK AWARENESS:** Montana smokers are significantly less likely than non-smokers to be aware that smoking causes low birth weight.⁷
- **LOW BIRTH WEIGHT:** Montana women who smoke during pregnancy are significantly more likely to have a low birth weight or preterm infant than non-smokers.³
- **SMOKING AFTER DELIVERY:** Twenty-one percent of Montana mothers surveyed in 2002 after delivery smoked.⁶

Objectives Healthy People 2010

16-17: Increase percent of pregnant women who abstain from alcohol, cigarettes, and illicit drugs to 99%.

27-6: Increase smoking cessation during pregnancy to 30%.

MONTANA QUICK STATS

22%

Women ages 18-44 who are current smokers (2008)²

59%

Women 18-44 who are current smokers and have tried to quit (2008)²

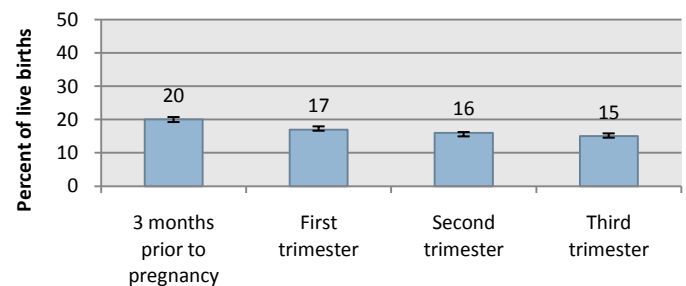
2219

Infants exposed to smoking in-utero (2008)³

\$491,237

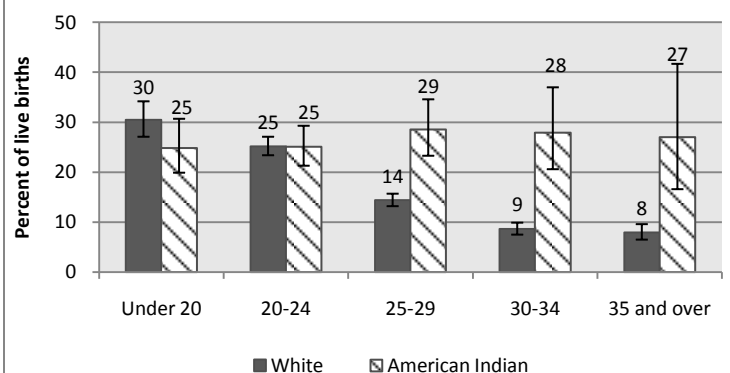
Smoking-Attributable Neonatal Expenditures (2003)⁴

Figure 1: Reported smoking prior to and during pregnancy, by timing, Montana, 2008
(Note: scale is not to 100)



I - Indicates 95% confidence interval.
Source: Office of Vital Statistics.³

Figure 2: Reported smoking during pregnancy, by maternal age and race, Montana, 2008
(Note: scale is not to 100)

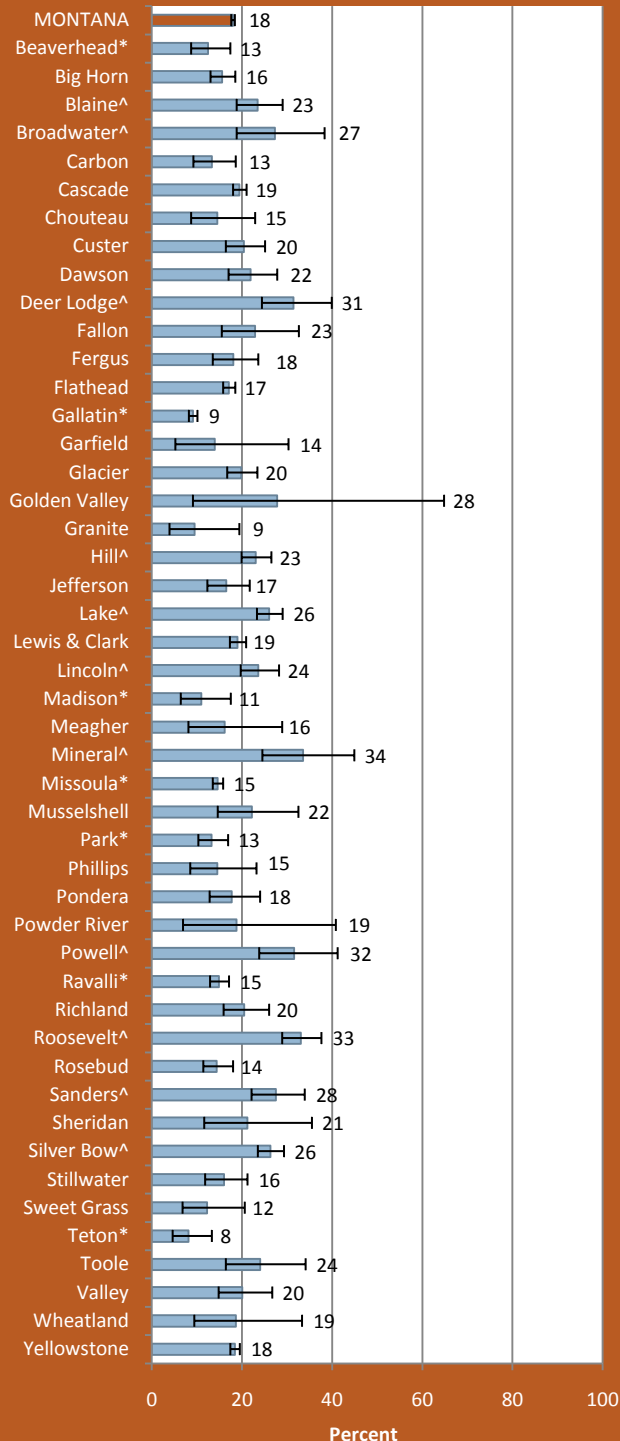


I - Indicates 95% confidence interval.
Source: Office of Vital Statistics.³

Smoking During Pregnancy

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Figure 3: Percent of live births where the mother reported smoking during pregnancy, by county of residence, Montana, 2005-2007



I – Indicates 95% confidence interval.

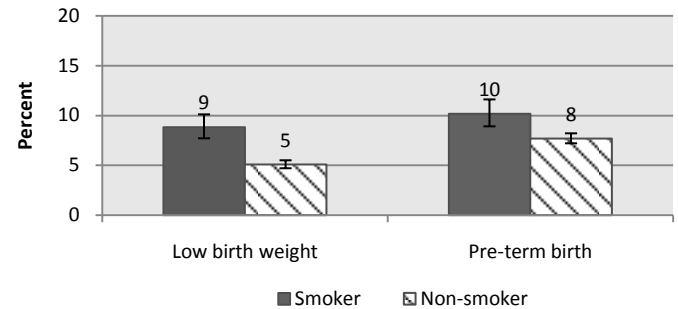
* Indicates county rate is significantly lower than the rest of the state.

^ Indicates county rate is significantly higher than the rest of the state.

Counties with fewer than 5 events are not shown.

Source: Office of Vital Statistics.³

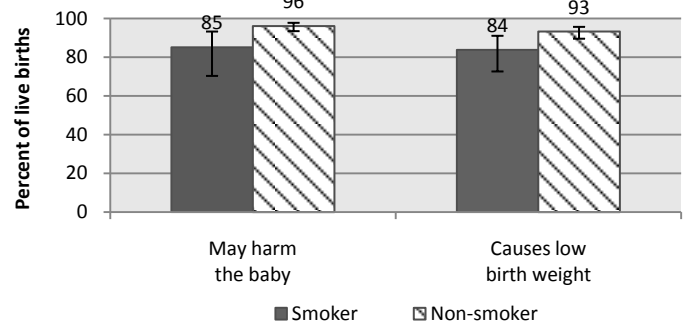
Figure 4: Low birth weight and pre-term birth rates by maternal smoking, singleton live births, Montana, 2008
(Note: scale is not to 100)



I - Indicates 95% confidence interval.

Source: Office of Vital Statistics.³

Figure 5: Awareness of risks associated with smoking while pregnant, Montana, 2008



I - Indicates 95% confidence interval.

Source: Adult Tobacco Survey.⁷

Sources:

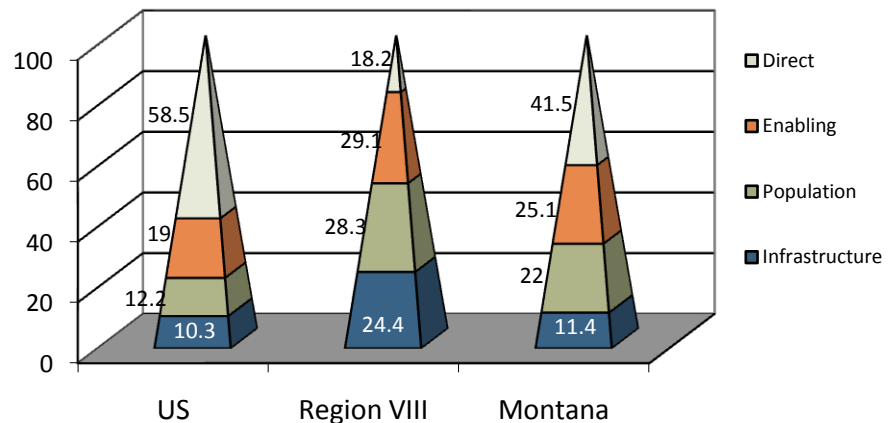
- Centers for Disease Control and Prevention. National Center for Chronic Disease Prevention and Health Promotion. Division of Reproductive Health. Tobacco Use and Pregnancy: Home [Web page]. Available at: <http://www.cdc.gov/reproductivehealth/tobaccoUsePregnancy/index.htm>. Accessed February 11, 2010.
- Montana Department of Public Health and Human Services. Behavioral Risk Factor Surveillance System (BRFSS), 2008. State data files. Analyzed using SPSS Complex Samples, PASW Statistics 18.
- Montana Department of Public Health and Human Services. Office of Vital Statistics. Birth data files. Analyzed using SAS 9.2.
- Centers for Disease Control and Prevention. Maternal and Child Health Smoking-Attributable Mortality, Morbidity, and Economic Costs (MCH SAMMEC). Available at: <http://apps.nccd.cdc.gov/sammec/>. Accessed February 18, 2010.
- Centers for Disease Control and Prevention (CDC). National Center for Health Statistics. Natality public-use data on CDC WONDER On-line Database, published March 2009. Available at: <http://wonder.cdc.gov/natality-current.html>. Accessed February 18, 2010.
- Montana Department of Public Health and Human Services. 2002 Pregnancy Risk Assessment Monitoring System (PRAMS). State data file. Analyzed using SPSS Complex Samples, PASW Statistics 18.
- Montana Department of Public Health and Human Services. Montana Tobacco Use Prevention Program. Adult Tobacco Use in Montana: Results of the 2008 Montana Adult Tobacco Survey. May 2009. Available at: <http://tobaccofree.mt.gov/publications/ats2008finalreport.pdf>. Accessed February 11, 2010.

MCH Program Capacity by Pyramid Level

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Montana's capacity to provide services related to each level of the pyramid differs from what is reported nationally and regionally. Based on reported expenditures for FFY 2008, Montana reports a larger percentage of funding expended on direct services and a lower percentage expended on infrastructure than the Region VIII average. When compared to the US percentages, Montana spends proportionately less on direct services than the national average, and more on enabling and population based services. Figure 1 depicts the percentage of total funding expended by level of the pyramid.

Figure 1: 2008 Percentage of MCH Expenditures by Level of the Pyramid



Source: MCHB TVIS Reporting system (<https://perfdata.hrsa.gov/MCHB/TVISReports/default.aspx>)

Montana's federal-state funding partnership proportions differ from regional and national distributions in several ways. Montana and other states in Region VIII (Colorado, Utah, South Dakota, North Dakota and Wyoming) depend upon the federal allocation more heavily than the nation as a whole. Montana also receives fewer state funds than do other states in Region VIII or the nation as a whole, depending instead on partnerships with county public health departments to overmatch the \$1.1 million distributed to them in MCH service contracts. With the exception of Utah, where over \$13 million in "other funds" are used for MCH services, no states in Region VIII, including Montana, have "other" funding sources. Montana's program income, consisting of local program billing for services rendered is similar to the proportion of the budget that is generated in Region VIII as a whole; nationally, program income accounts for a larger proportion of the MCH federal-state partnership.

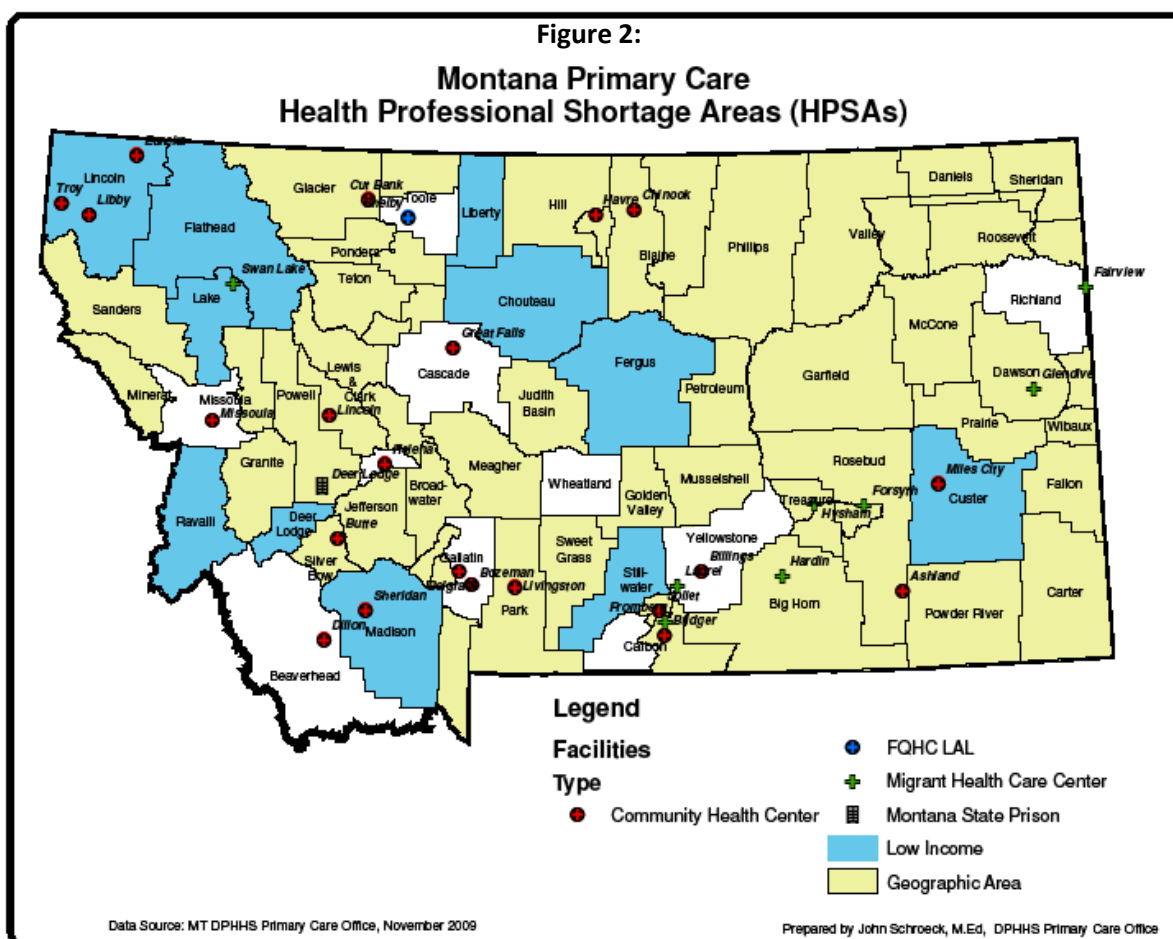
As with many states, Montana's economic situation is not conducive, nor supportive of introducing any new programs requiring state general fund moneys. The Governor's Office has instructed all Departments that the Governor's Office will not entertain any requests for any new programs requiring state general fund dollars. Therefore, the FCHB will continue to seek additional financial resources, as well as develop new and maintain existing relationships with public and private partners for the intent of addressing the identified priority areas.

Despite the financial challenges, Montana recognizes that focused attention to and impact on the selected priority areas and performance measures will require the commitment of resources. Because a large portion of Montana's federal-state partnership funds consist of local match, local input was actively solicited and included in the selection of priority areas and performance measures. Local contractors have important roles in implementing programs and services which may positively impact the percent of children who receive dental services, the percent of women who smoke during pregnancy, the percent of toddlers who receive age appropriate immunizations, and other services that affect the MCH populations.

DIRECT HEALTH CARE SERVICES

Montana has documented shortages of primary care services (defined as a low income medically underserved population or health professional shortage areas) in at least part of all 56 Montana counties in 2010. Specialty services, including those for children with special health care needs, are an even more challenging access issue in Montana. The total population in the state is debatably large enough to support a practice of some specialists, let alone subspecialists. With fewer than 250,000 children less than 18 years of age in the entire state, pediatric specialty and subspecialty practices are not always financially viable. Programs such as the regional clinic programs supported by the CSHCN program enhance the abilities of communities to sponsor and support specialist services, including those by out of state providers. Clinics supported by the Children's Special Health Services (CSHS) Program have seen increases in participation over the last 3 years, due in part to expansion of the clinics to identified need areas, such as cystic fibrosis. Montana's few neonatologists, perinatologists, and other pediatrics specialists are located primarily in the larger communities of Billings, Great Falls, and Missoula, rendering the services not easily accessible to residents in the eastern portion of the state and many rural and frontier areas.

Direct service expenditures include those that support regional clinic nursing, administrative, and medical staff. A small proportion of the funding continues to support direct financial assistance for qualified medical services for families with CSHCN. Site visits during FFY 11 and 12 will assist communities to categorize reported expenditures based on current definitions. Figure 2 shows primary care shortage designations in Montana as of November 2009.



ENABLING SERVICES

Enabling services are defined as services which enhance financial access and cultural acceptability, enabling contractors to bring services to the individuals, including, but not limited to, home visiting. Mobile dental vans continue to be of interest in Montana, but the lack of foundations or organizations that can adequately maintain and sustain programs has limited the expansion of services beyond a Ronald McDonald van program in the Billings area. Montana's federal-state partnership funding does support home visiting programs by public health professionals to high risk pregnant women and infants in 16 communities across the state. Expansion of those services beyond what are essentially the largest communities requires a resource commitment that is very difficult for smaller communities to sustain. In smaller communities, the small birth cohort makes it difficult to have a large enough home visiting population to support even a part time health professional. Complicating this issue is the lack of qualified professionals in small communities who are willing to work for what are often low wages. These factors, in addition to the constant balance of public health priorities and resources in small communities make home visiting a challenging service to provide in rural and frontier settings.

As in other rural settings, Montana's communities frequently partner with agencies and programs serving high need populations to address transportation issues. Montana's Medicaid program continues to offer payment for transportation services, including services provided by friends and relatives of clients requiring transportation. Aging and developmental disability service programs offering transportation are also frequently willing to provide rides to and from medical services for the MCH population. The Montana Coordinated Transportation Handbook provides communities and providers with information about how to access and pay for transportation services statewide. (Source: Montana Council on Developmental Disabilities. Available at: http://www.mtcdd.org/pdf_files/MT%20Coord%20Transp%20Handbook.pdf. Accessed June 6, 2010.)

POPULATION BASED SERVICES

Montana's newborn metabolic and hearing screening programs are examples of well planned, effectively implemented population based services. Both programs were authorized by the 2007 Legislature, which mandated hearing screening reporting and expanded metabolic screening to the current 28 recommended newborn screening tests.

The hearing screening program has been expanded from a voluntary program existing in some hospitals to a statewide screening program that coordinates with Montana's School for the Deaf and Blind, which is required by state law to track all interventions provided to deaf or hard of hearing children. In 2008, 95% of infants were screened by one month of age. This success is due in part to our statewide advertising campaign and efforts by the Hearing Conservation Program audiologists. Of note was the 84% increase in the number of babies born outside of hospitals who were screened in 2008 over the previous calendar year.

The newborn metabolic testing program continues to successfully screen 99% of newborns within 30 days after birth. Montana's legislature responded to a request for a funded follow up program, providing some funding to support a contracted follow up program in the state. After two years of active recruitment, the contractor recently brought a metabolic geneticist to the state to oversee the program, which provides clinical services, case management, and provider and public education regarding metabolic testing and conditions to the state.

INFRASTRUCTURE BUILDING SERVICES

As discussed earlier in this document, the Family and Community Health Bureau actively collaborates with programs serving the MCH population. The WIC program and Targeted Case Management for Children with Special Health Care Needs are programs within the Bureau, providing opportunities for education and linkages as well as billing resources for local partners. The Primary Care Office (PCO) is also located within the Bureau, and the Office's Analysis of Unmet Need, being developed by staff and contractors in 2010, will include an assessment of the needs of children, including low income and those without insurance.

The CSHCN program is actively engaged in coordination with other partners, as evidenced by the regional clinic system and the contractual arrangements for newborn screening follow up and genetic services. These partners include the Chronic Disease Bureau, Children's Mental Health, Part C, EPSDT, school nurses, regional medical directors, and 26 healthcare coverage payers. The CSHCN program is also in the process of developing a referral program.

Montana recently submitted a HRSA grant for funding which will promote the availability of oral health providers for low income populations by promoting clinical placements for dental and dental hygiene students. Montana also submitted a renewal of a National Health Service Corp (NHSC) State Loan Repayment grant which may provide loan repayment for dentists and dental hygienists working in areas identified by the federal government as dental health professional shortage areas. The state received state funding in 2009 to establish an injury prevention program; that funding, along with MCH service contract funding which partially supports Fetal, Infant, and Child Mortality Review in communities, will help the state and partners to address the child safety priority area. The Tobacco Use Prevention Program in Montana is collaborating with Medicaid to improve access to and utilization of data which will contribute not only to the performance measure regarding tobacco use in pregnant women but also to the objective intended to target efforts to high risk women pre-conceptually.

Selection of State Priority Needs

LIST OF POTENTIAL PRIORITIES

Multiple topics were initially identified as possible priority areas. The list of topics below includes those that were a part of the original list, but were not well enough defined, lacked data to describe the problem or identify possible solutions, or the state Title V program had no capacity to address them. In addition, some of the initial topics were behaviors or interventions themselves, and so might have been incorporated into another topic area.

Adolescent tobacco, alcohol, and drug use	Maternal mortality
Alcohol use during pregnancy	Parental relationships
Birth control and family planning	Parenting skills
Child care	Prenatal care utilization
Child mortality	Safe home environment
Children's mental health	Sexual health education for adolescents
Infant mortality	Specialty services
Early intervention/newborn screening	Women's mental health
Family support services	Women's oral health
Financial assistance	Teen birth (included in unintended pregnancy)
Low birth weight and preterm birth	Violence/bullying

METHODOLOGIES FOR RANKING/SELECTING PRIORITIES

Criteria for identifying priority areas were determined by the Maternal and Child (MCH) Health Block Grant Guidance and the MCH Program. In the block grant guidance, priority needs are described as topics that “need targeted efforts for improvement and/or continuation of progress,” and “include those areas in which the State believes it has a reasonable opportunity to maintain, modify, or enhance existing interventions, initiatives, or systems that have been successful, or begin new interventions, initiatives, or systems that are expected to result in needed improvements.”

The initial methodology for selecting the priorities included:

- Relevant to one of the three MCH populations
- Stakeholder/public input indicates interest or need
- Data available on topic
- Data support need
- Capacity to address topic
- Political will/interests
- Not already measured by a National Performance Measure
- Within the responsibility of the MCH or CSHCN Director
- No system in place to address the need
- Topic or issue can be sufficiently focused
- Possible interventions or approaches to address priority area can be identified

Each criteria is defined in more detail below:

Relevant to one of the three MCH populations: Each need should relate to at least one of the MCH population groups: 1) pregnant women, mothers, and infants, 2) children, or 3) children with special health care needs.

Stakeholder/public input indicates interests or need: This includes input from stakeholders as a part of the ongoing MCH Needs Assessment. Stakeholder input was collected through annual surveys of local health departments, through a survey of MCH and public health partners throughout the state, and through focus groups and key informant interviews.

Data available on topic: Data available on a topic are important to be able to quantify and describe the issue. In some cases a priority may be selected despite a limited amount of data due to the strength of the other criteria. In these cases, the state performance measure may be developmental to facilitate the development of a surveillance or other data collection system.

Data support need: Self-explanatory. In some cases, a priority may be selected as a priority on the strength of the other criteria.

Capacity to address topic: This item weighs heavily in the decision to include a topic as a priority. Although an identified topic may be very important, and there could be a documented need in the MCH population, without funding, program, or staff who can address the topic, it is not a priority at this point. Priorities can change over time, particularly if the capacity to address an issue changes.

Political will/interests: This criterion allows the MCH program to be responsive to political priorities and capitalize on partner interest in MCH topics.

Not already measured by a National Performance Measure: Topics that are already measured with a national performance measure, with an adequate level of detail to reflect the population that MCH programs can influence, are not included as priorities.

Within the responsibility of the MCH or CSHCN Director: This item weighs heavily in the decision to include a topic as a priority. Multiple programs elsewhere in the Montana Department of Public Health and Human Services address topics of import to the MCH population.

No system in place that adequately addresses the need: If a system is already in place to address the need, this could indicate that the need is met. Sustaining the program or system may be a priority, but the topic may not be selected as a priority for the purposes of identifying new state performance measures.

Topic is sufficiently focused: Broad topics, such as low birth weight, are multi-faceted and can be challenging to address. In these cases, the program may choose to address a topic related to the cause of low birth weight, or focus on a population with a higher risk of low birth weight rather than develop a state priority and performance measure that includes a very large population that the MCH program does not have the ability to address.

Possible interventions or approaches to address priority areas can be identified: In an initial review of literature and research available on the topic area and in discussions with stakeholders, some potential programs or approaches to address the issue should be identified.

Once the list of potential priority areas was narrowed down using the criteria, discussions took place with the Public Health System Improvement (PHSI) Task Force regarding the availability of data on a measure to indicate a baseline or progress toward a goal, the political and financial support and resources to address the topic area, and most importantly, the capacity for addressing the priority area at a state or local level.

The following topics were considered by the Public Health Improvement Task Force Executive Committee as possible priority areas. To explore the issues more in depth, summaries were developed for the topics listed in the following chart and performance measures were drafted for each.

Potential Priority Area (* indicates topic was selected as a priority area)	Summary Discussions (why considered, why not included)
Access to care*	Of concern for much of the state population. Current related measure (National Performance Measure 13: % of children without health insurance) is very broad. State Performance Measure could be focused on CSHCN. Many elements of access to care are outside the responsibility of the MCH or CSHCN Director.
Child safety and unintentional injury*	More focused than overall mortality. Injury deaths are a concern in the state; many partners working in this area, possibilities for collaboration.
Immunizations (childhood)*	Much interest in Montana; state has one of the lowest rates of coverage for 19-35 month olds. Two specific shots are of primary concern-varicella and 4 th DTaP. Opportunities for collaboration with state and local programs and much interest by local partners.
Oral health (children)*	Priority of partners. Possibility for collaboration. Good opportunities for intervention, sealants, fluoride varnish.
Preconception health*	Intervention with women with identified risks could improve pregnancy outcomes. Intervention during preconception or interconception period could relate to other elements of interest to MCH population – prenatal care, smoking, previous preterm birth, obesity, etc.
Smoking during	Smoking during pregnancy rates are very high and have not declined in recent years.

pregnancy*	Related to several other factors (such as low birth weight and preterm birth). Cross-cutting issue that many programs and partners could collaborate on. Priority of state and local partners.
Breastfeeding	Montana doing well compared to other states, but rates are not increasing. Policy-related interventions were considered. National performance measure already covers topic.
Children with special health care needs (CSHCN)	Fits with partner and stakeholder priorities, data support need. Not sufficiently focused, multiple national performance measures on CSHCN that may already cover areas of interest. Access to care performance measure ended up being CSHCN-focused.
Exposure to secondhand smoke in childhood	Data support need, not already measured with a national performance measure. However, minimal data on topic and limited capacity to address.
Labor and delivery	C-section rate increasing. Limited capacity to address issue.
Nutrition, physical activity, and obesity	Data available on topic and indicate need. Partners interested in topic. Current national performance measure is sufficient.
Unintended pregnancy	A concern for teens and others. Limited data. Related to preconception health. May not have capacity to address at this time.

Montana has one of the lowest immunization rates for 19-35 month olds in the country, particularly for varicella and the 4th dose of DTaP (Diphtheria, Tetanus, and Pertussis). Due to the low rates, the Public Health Improvement Task Force decided to select six priority areas and develop two performance measures within the immunization area (see Priority Needs and State Performance Measures section below). The immunization topic area actually includes two priorities: varicella and the 4th DTaP shot.

PRIORITIES COMPARED WITH PRIOR NEEDS ASSESSMENT

During the previous needs assessment process, priority areas were developed independent of the performance measures. While all but one of the previous priority areas relate to at least one state and national performance measure, they were more directly correlated with objectives in the Family and Community Health Bureau's (FCHB) strategic plan.

For the 2010 needs assessment process, priority areas were identified simultaneously with performance measures. Only areas with an identified measure that was relevant at the state and/or local level were chosen.

Previous Priority	New Priority	Discussion
Unintentional injuries	Child safety/unintentional injury	Continued; still a priority in the state.
Promotion of preventive and accessible health care	Access to care	Continued; focused on CSHCN.
Family support and education		Replaced; state priorities shifted and priorities with possible related interventions identified.
Mental health and substance abuse		Replaced; outside the responsibility of the MCH or CSHCN Director.
Nutrition and obesity prevention		Replaced; current national performance measure on topic.
Reproductive and sexual health	Preconception health	Continued; with a focus on preconception health.
Family and Community Health Bureau capacity development		Replaced; capacity development is ongoing, topic areas identified through this needs assessment are specific to health concerns.
Environmental health		
	Smoking during pregnancy	Added; see discussion above on priority areas.

	Immunization	Added and includes two performance measures; see discussion above on priority areas.
	Oral health	Added; see discussion above on priority areas.

PRIORITY NEEDS AND CAPACITY

Priority Area	Pyramid Level(s)	MCH Program Capacity
Access to care	Direct health care services	The Children's Special Health Services (CSHS) section within the MCH program coordinates with hospitals and care providers throughout the state to provide regional clinics for children identified with cleft lip and/or palate.
Oral health	Population-based (local), Infrastructure-building (state)	The MCH program has conducted many oral-health related data collection and collaboration activities over the past five years. Most recently, the Access to Baby and Child Dentistry (ABCD) program was implemented in several Community Health Centers in the state through a contract with the MCH program. A portion of a health educator's time is currently dedicated to oral health, with more projected if additional grant funding is available.
Immunizations	Population-based (local), Infrastructure-building (state)	The MCH program is responsible for the local MCH service contracts with the Montana counties. Many of the county MCH service contractors focus on immunization efforts within their communities. At the state level, the MCH program collaborates with the immunization program (located in a different bureau within the health department) to provide information on immunization activities to local partners.
Preconception health	Population-based (local), Infrastructure-building (state)	The MCH program includes the Public Health Home Visiting (PHHV) Program, which targets high risk pregnant women and infants.
Smoking during pregnancy	Population-based (local), Infrastructure-building (state)	The MCH program includes the Public Health Home Visiting (PHHV) Program, which targets high risk pregnant women and infants and includes smoking cessation as one of its objectives. The program collaborates with the Montana Tobacco Use Prevention Program on making smoking cessation information available to PHHV staff and clients. The WIC program (also located within what is considered Montana's MCH program) also includes a smoking cessation component.

MCH POPULATION GROUPS

Each MCH population group is included in at least one priority area and state performance measure.

Population	Priority Area	Performance Measure
Pregnant women, mothers, and infants	Preconception health	(Developmental) The number or percent of Medicaid clients who have an identified risk factor during a previous live birth (gestational diabetes, preterm birth, preconception obesity) and receive follow-up by primary care or public health providers.
	Smoking during pregnancy	The percent of women who smoke during pregnancy.
Children	Oral health	The percent of Medicaid clients 0 through 6 years of age who have had a dental screening during the year.

	Unintentional injury	The rate of death to children 0 through 17 years of age caused by unintentional injuries (per 100,000).
	Immunizations	<ul style="list-style-type: none"> - The percent of children 19-35 months of age who have received the 4th immunization in the diphtheria, tetanus, and pertussis (DTaP) series. - The percent of children 19-35 months of age who have received an immunization against varicella.
CSHCN	Access to care	The percent of children with cleft lip and/or palate receiving care in interdisciplinary clinics.

PRIORITY NEEDS AND STATE PERFORMANCE MEASURES

Maternal and Child Health (MCH) Priority Areas and Performance Measures for the 2010-2015 Montana MCH Block Grants

MCH Priority Area	MCH Performance Measures
Access to care	1. The percent of children with cleft lip and/or palate receiving care in interdisciplinary clinics.
Oral health	2. The percent of Medicaid clients 0 through 6 years of age who have had a dental screening during the year.
Preconception health	3. (Developmental) The number or percent of Medicaid clients who have an identified risk factor during a previous live birth (gestational diabetes, preterm birth, preconception obesity) and receive follow-up by primary care or public health providers.
Child safety and unintentional injury	4. The rate of death to children 0 through 17 years of age caused by unintentional injuries (per 100,000).
Smoking during pregnancy	5. The percent of women who smoke during pregnancy.
Immunizations*	6. The percent of children 19-35 months of age who have received the 4 th immunization in the diphtheria, tetanus, and pertussis (DTaP) series. 7. The percent of children 19-35 months of age who have received an immunization against varicella.

*Due to the low immunization rate in the state, particularly for varicella and the 4th dose of DTaP, the Public Health Improvement Task Force decided to identify two immunization priority areas and performance measures.

Outcome Measures – Federal and State

The outcome measures are general measures of the health status of the maternal and child health population. The MCH program in Montana often only works with a portion of the MCH population in the state, and thus the outcome measures do not often reflect program-specific measures and the effects of specific interventions. Instead, they provide a useful overall perspective on the status of MCH. In most cases, Montana met or exceeded the performance objective for the outcome measures at least once during the previous five-year period. However, due to the variation in rates from year to year and the myriad of factors that can affect the outcome measures, many of which are beyond the control of the MCH program, a year-to-year measure of performance is not as useful as a look at the 5-year trend. A five-year goal or a Healthy People 2010 objective may be more useful than the one set annually by the program based on review of the rate and prediction of factors that will affect the rate during the coming year. In the future, the MCH program will consider setting longer-term objectives for the performance measures instead of altering the objective each year.

Infant mortality is an overall measure, and the neonatal, post-neonatal, and perinatal mortality rates provide additional focus on time periods surrounding delivery and the first year of life that are associated with different risks. Several of the new state performance measures relate to the infant health outcome measures, specifically, the number or percent of Medicaid clients who have an identified risk factor during a previous live birth (gestational diabetes, pre-term birth, preconception obesity) and receive follow-up by primary care or public health providers and the percent of women who smoke during pregnancy. The percent of children with cleft lip and/or palate receiving care in interdisciplinary clinics is also associated.

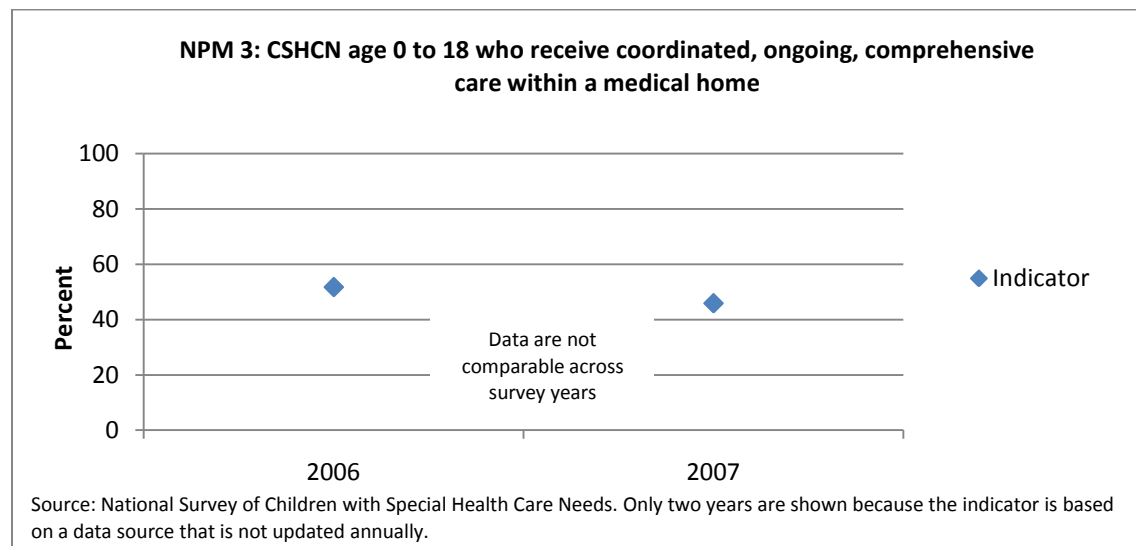
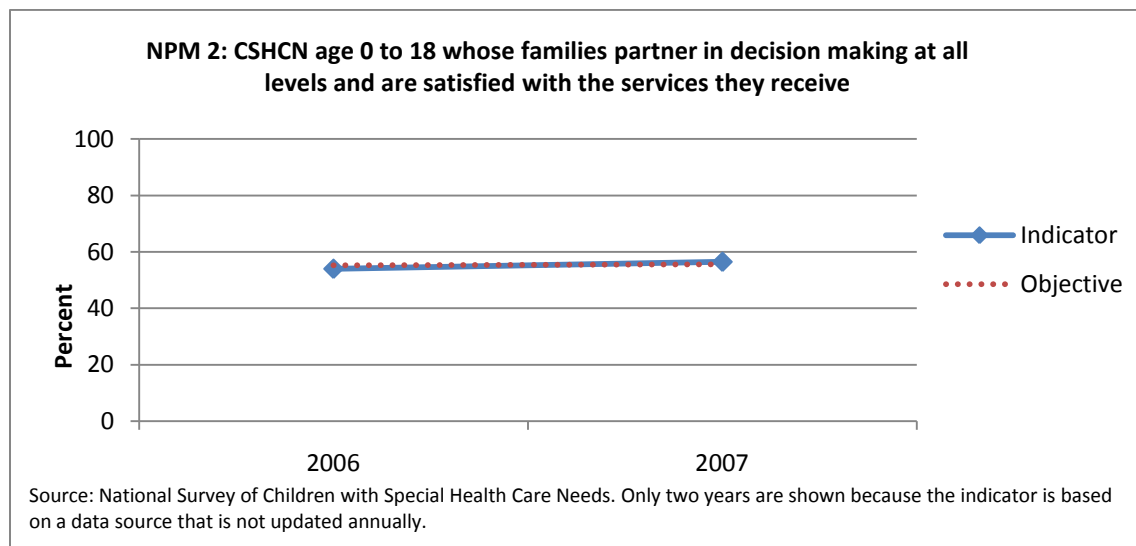
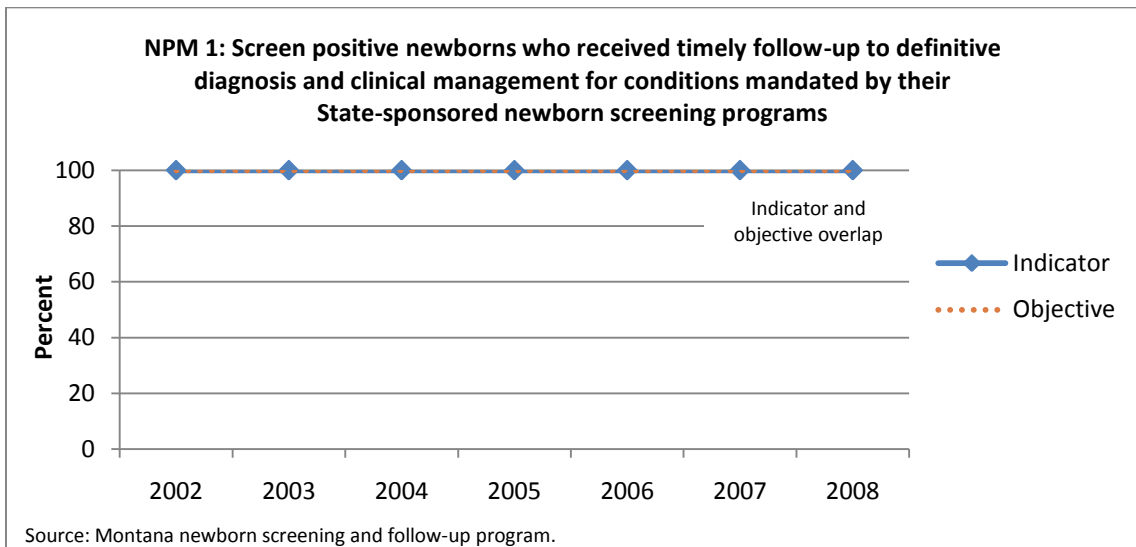
National Outcome Measure 6, the child death rate per 100,000 children aged 1 through 14, relates to new State Performance Measure 4: the rate of death to children 0 through 17 years of age caused by unintentional injuries. The State Performance Measure, like National Performance Measure 10 (the rate of deaths to children ages 14 years and younger caused by motor vehicle crashes), measures a more specific rate that contributes to the outcome measure.

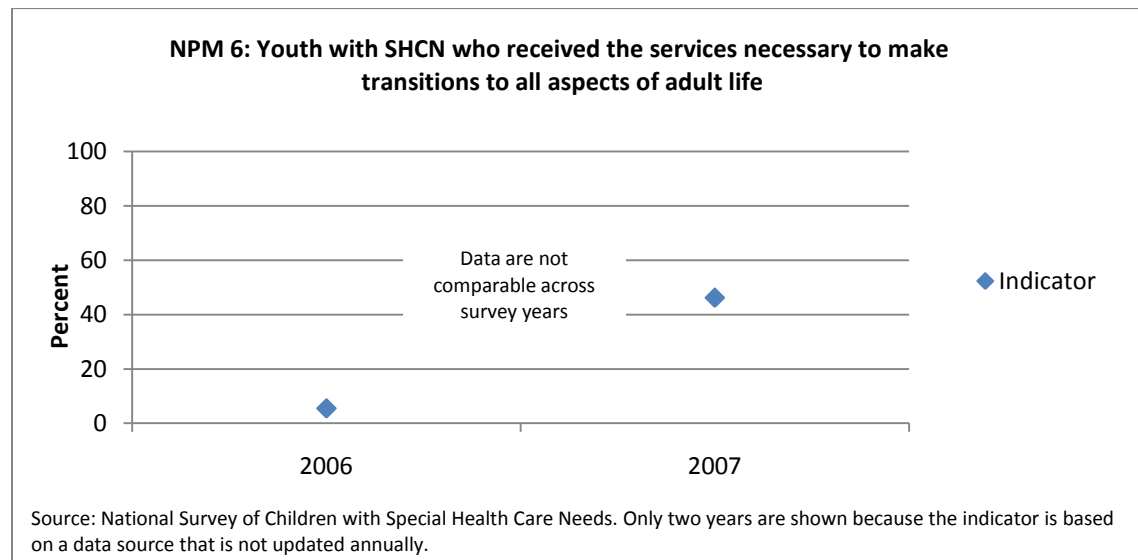
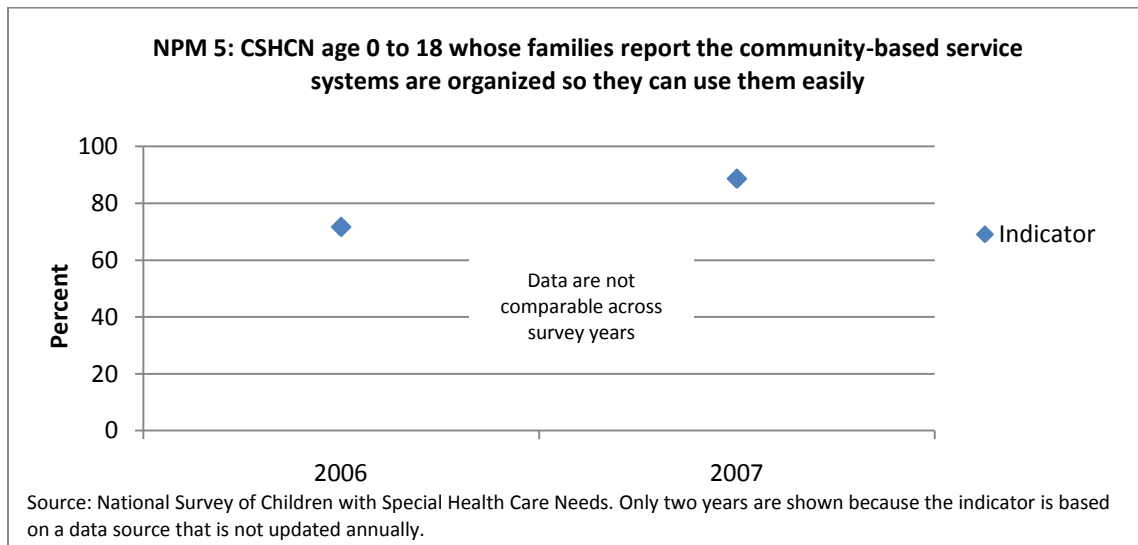
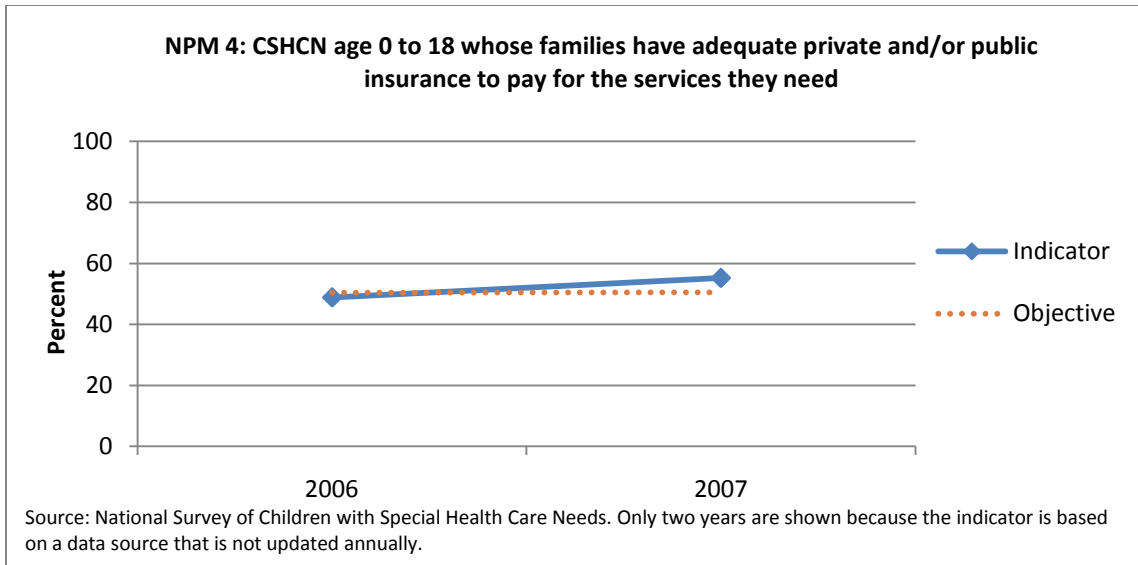
Montana has added one additional outcome measure: The Native American Infant Mortality Rate. Approximately 13% of the births within the state are to American Indian mothers. The mortality rate for American Indian infants was an important population-based measure for the state. Montana has not historically reported on National Outcome Measure 2 (the ratio of the black infant mortality rate to the white infant mortality rate) because the numbers are so small that it is not a useful measure. The Native American infant mortality rate will continue to be a state outcome measure.

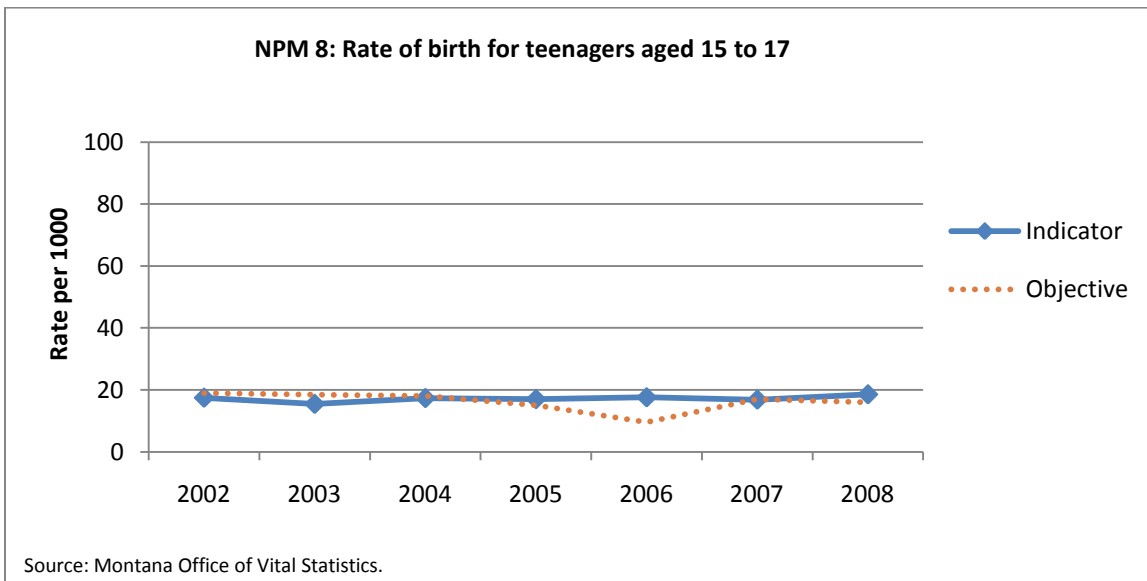
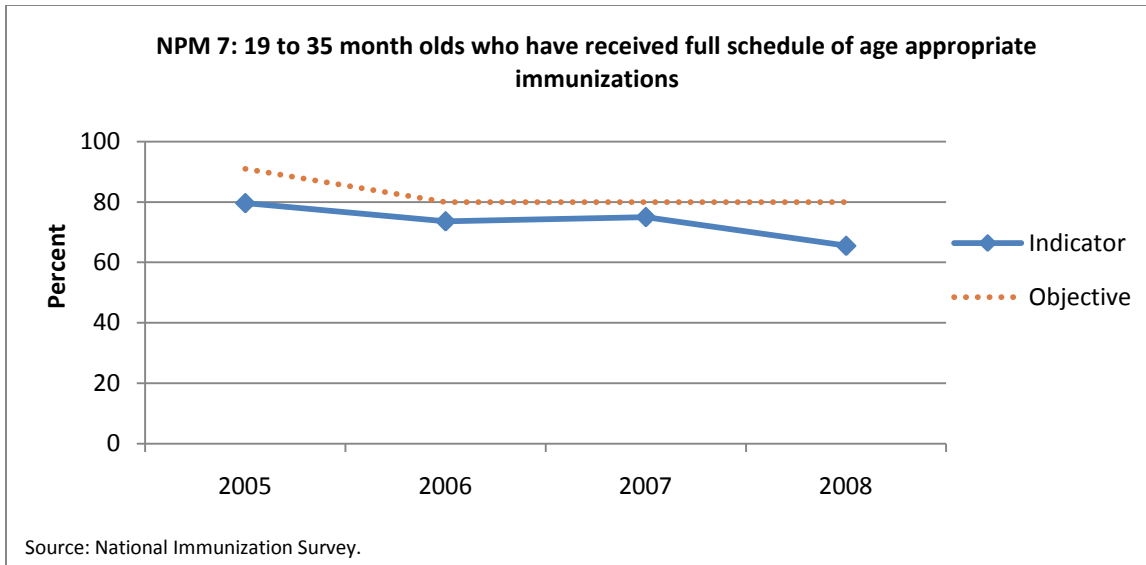
Trend charts: MCH Block Grant Performance and Outcome Measures

2010
Montana
MCH
Needs Assessment

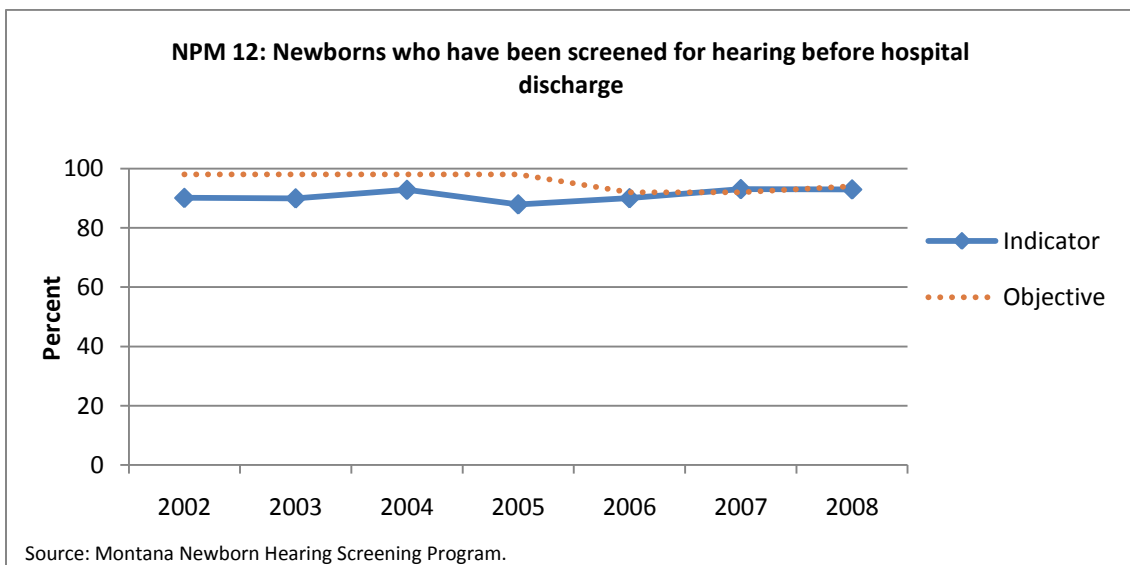
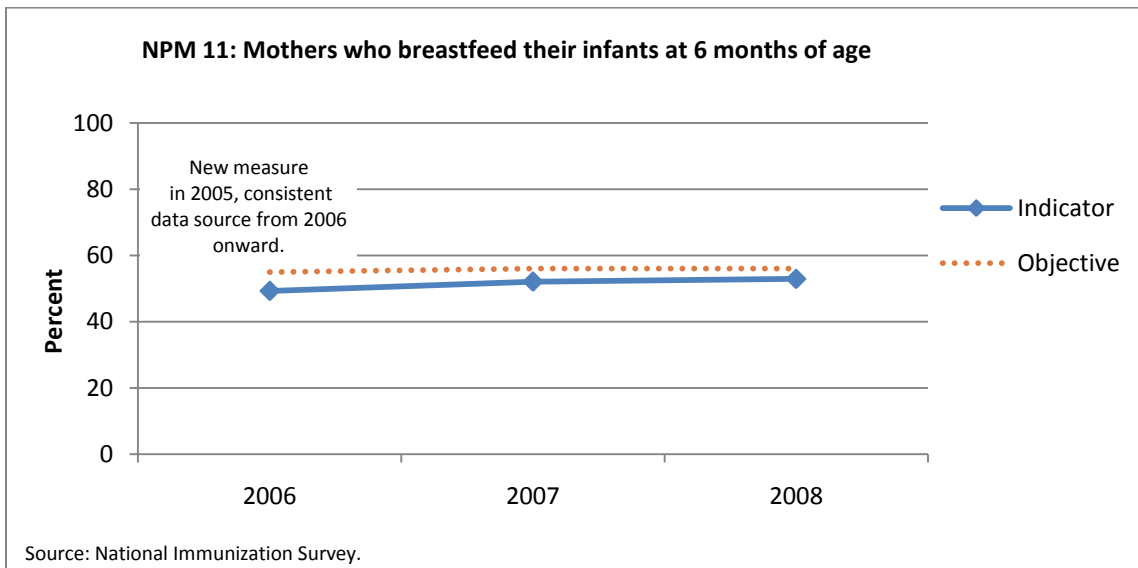
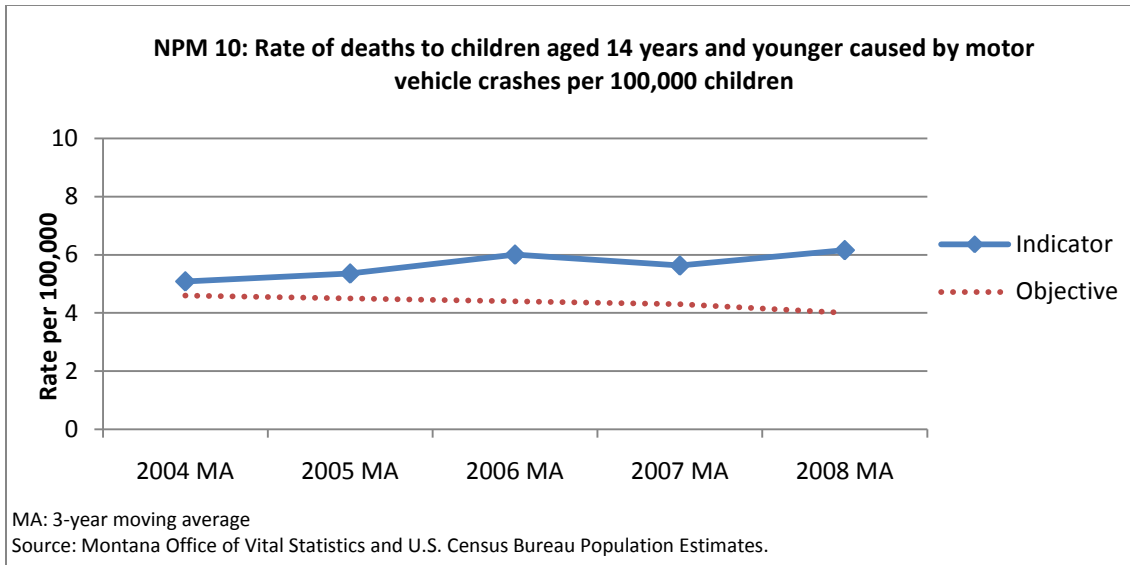
NATIONAL PERFORMANCE MEASURES



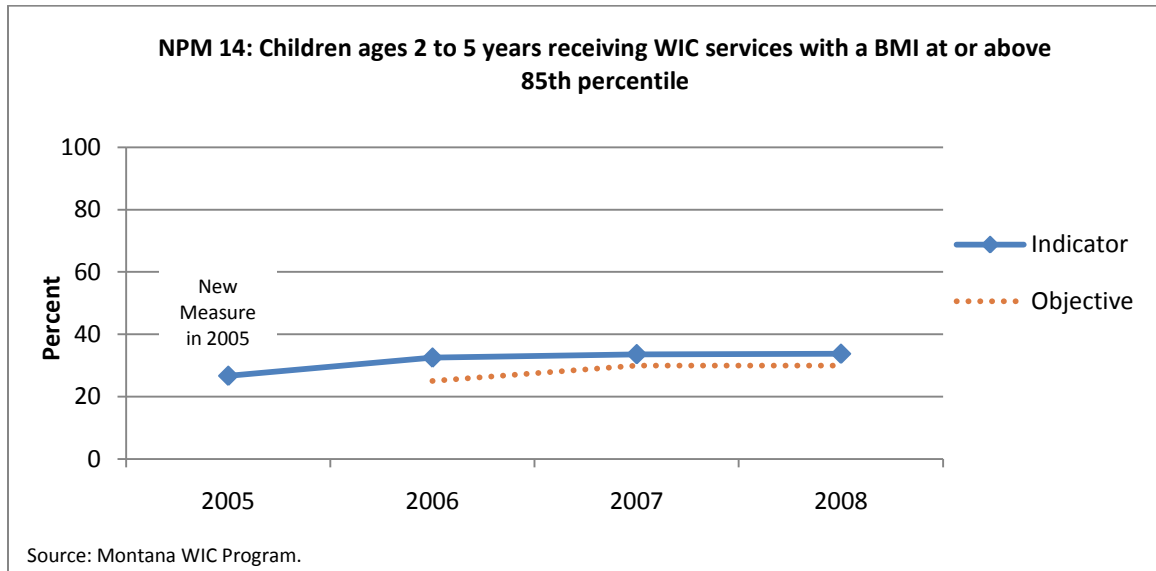




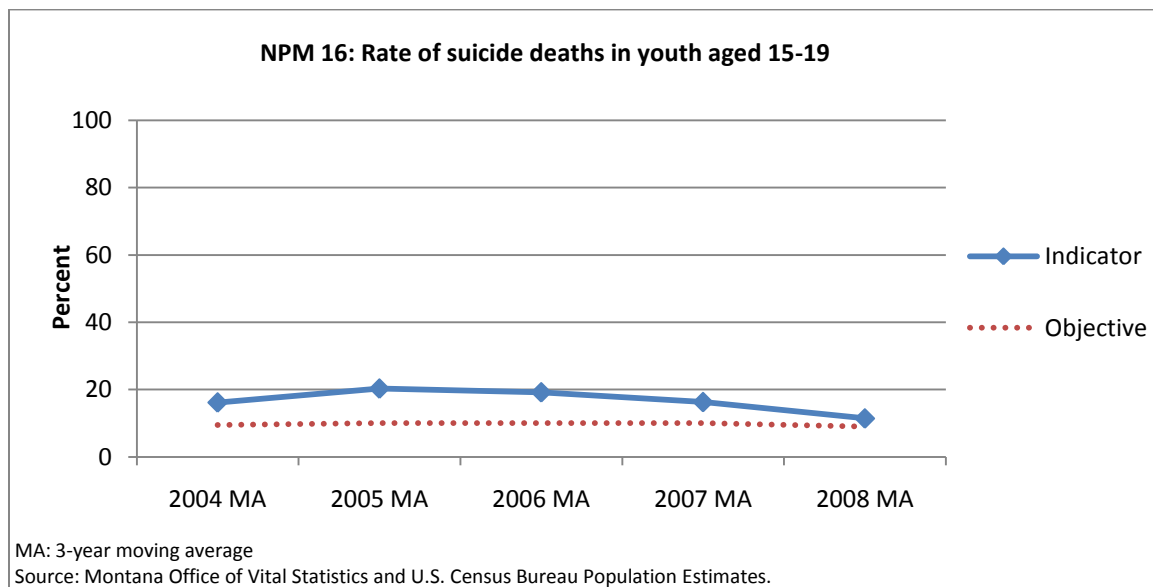
NPM 9: Third graders who have received protective sealants on at least one permanent molar tooth. *Data source for block grant reporting not consistent; see Oral Health topic summary for more detail on measure.*

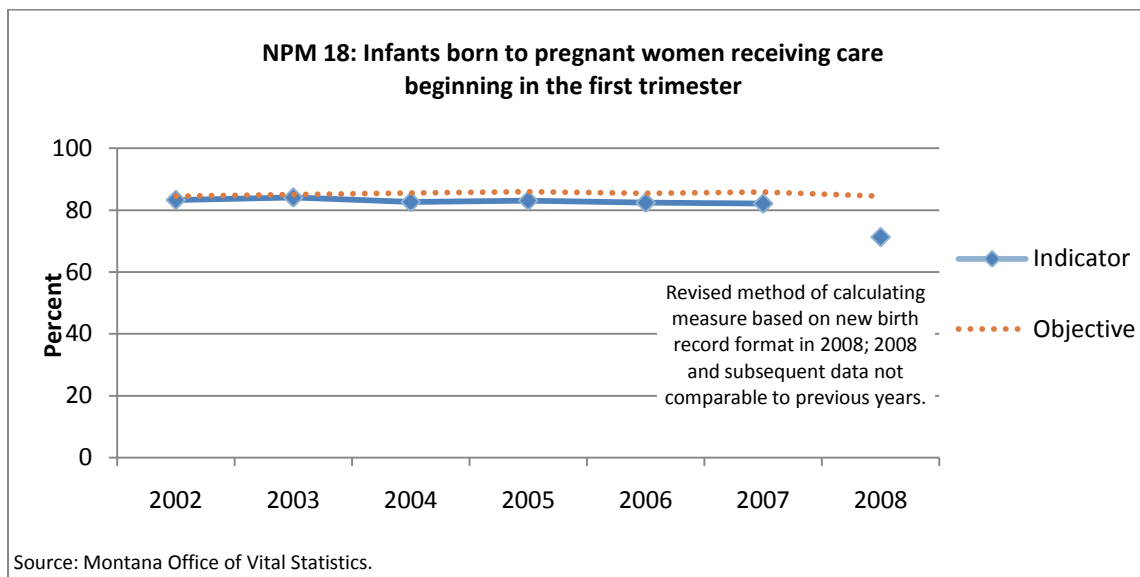
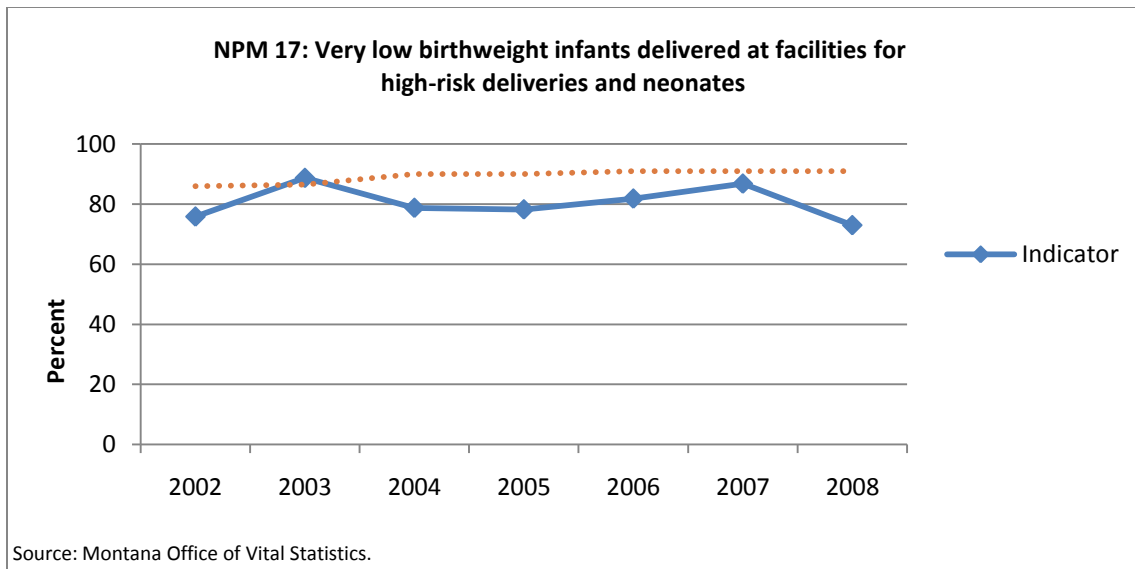


NPM 13: Percent of children without health insurance. *Data source for block grant reporting not consistent; see Access to Care topic summary for more detail on measure.*

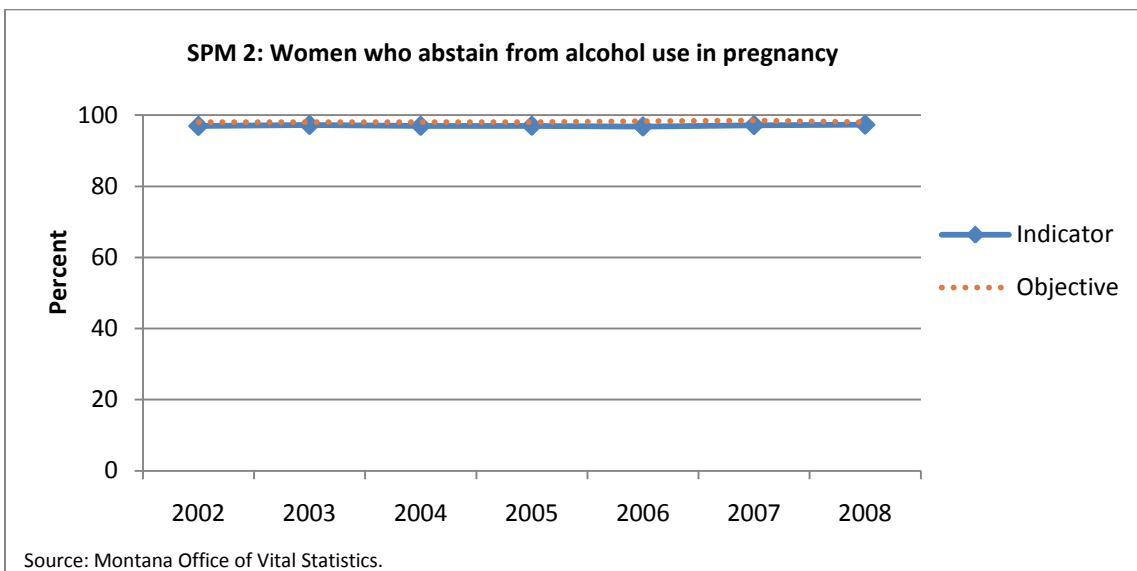
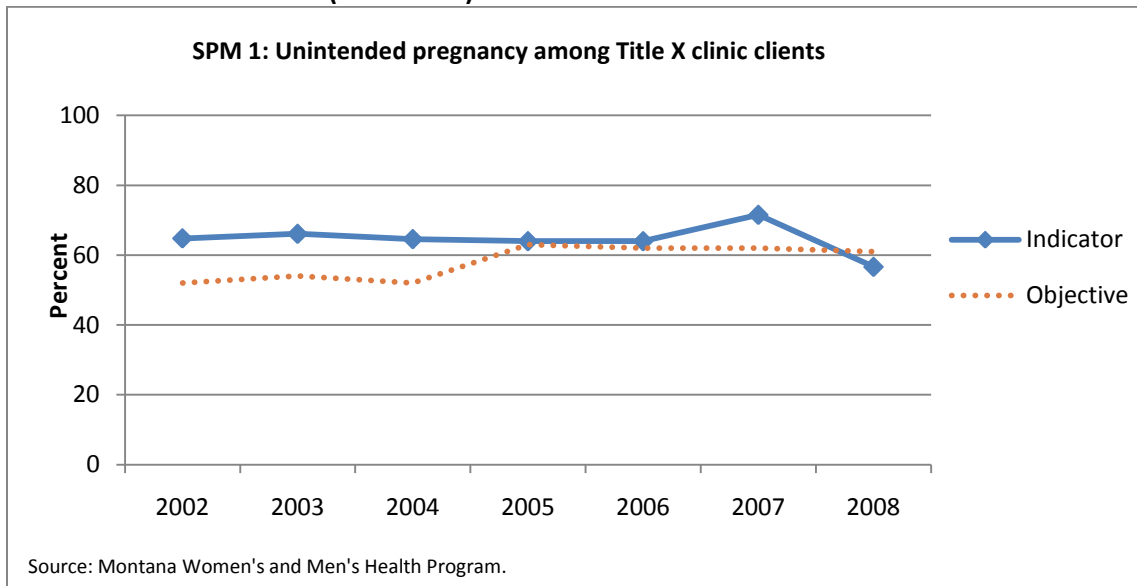


NPM 15: Percent of women who smoke in last 3 months of pregnancy. *Data source for block grant reporting not consistent; smoking by trimester only collected on Montana birth records as of 2008. See Smoking during Pregnancy topic summary for more detail on measure.*

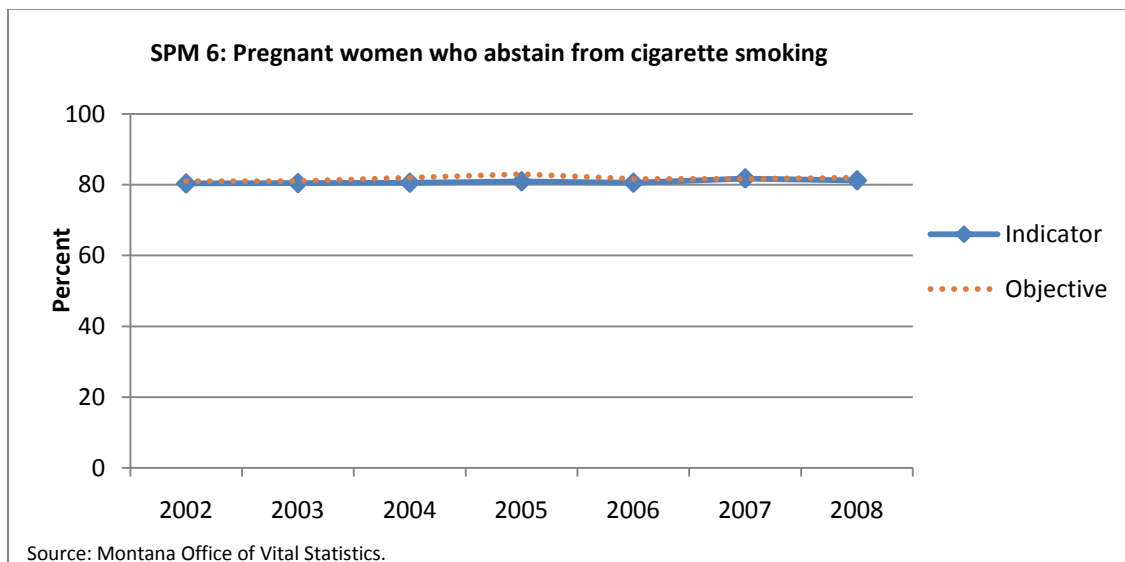
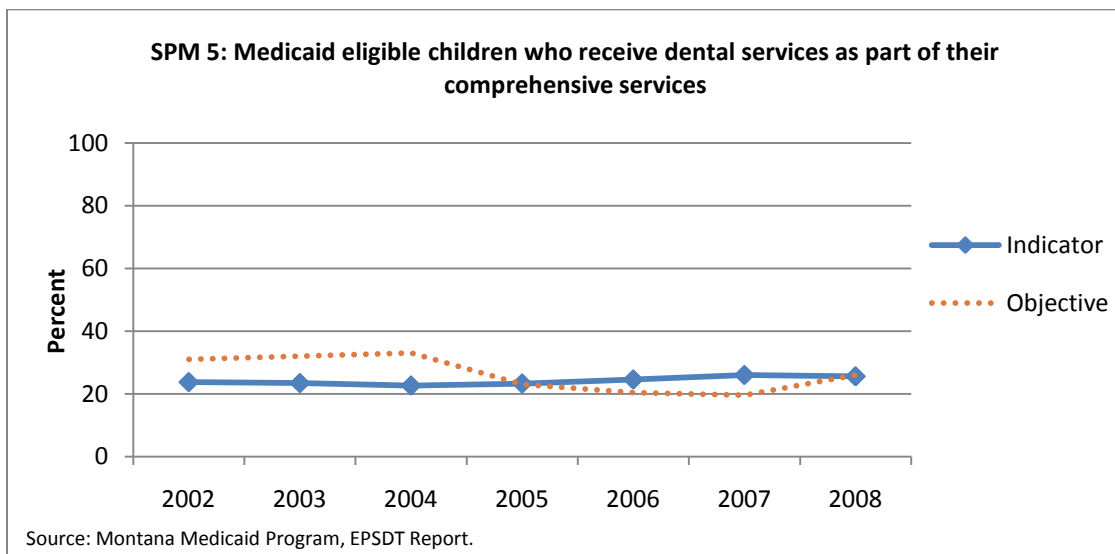
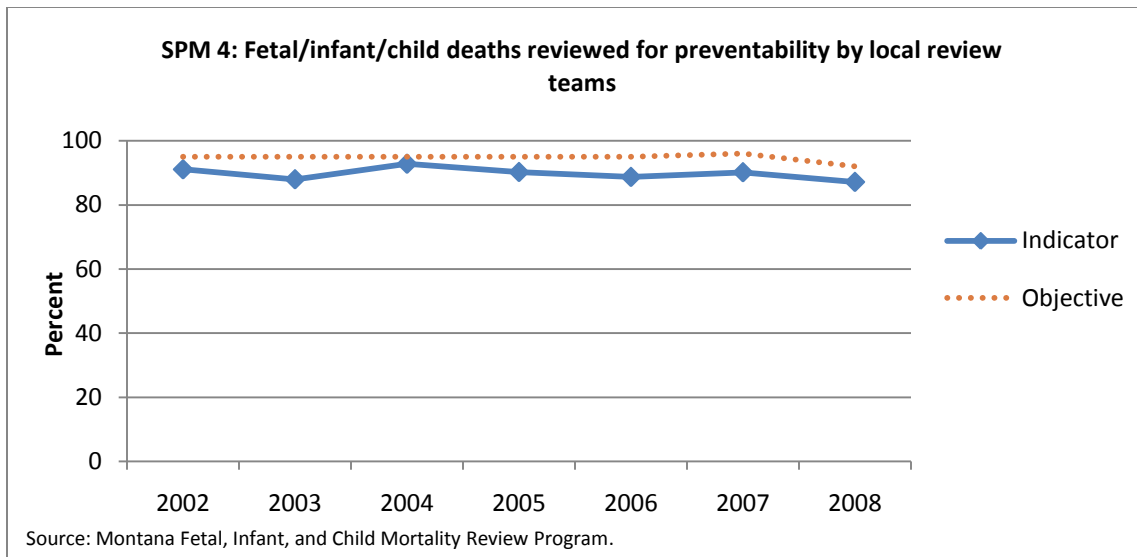


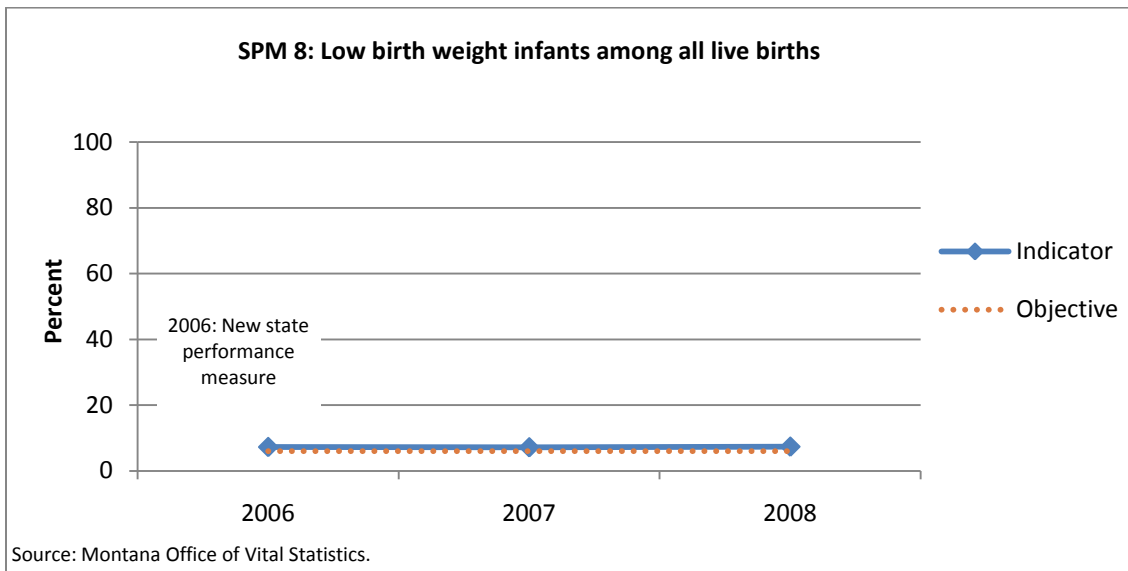
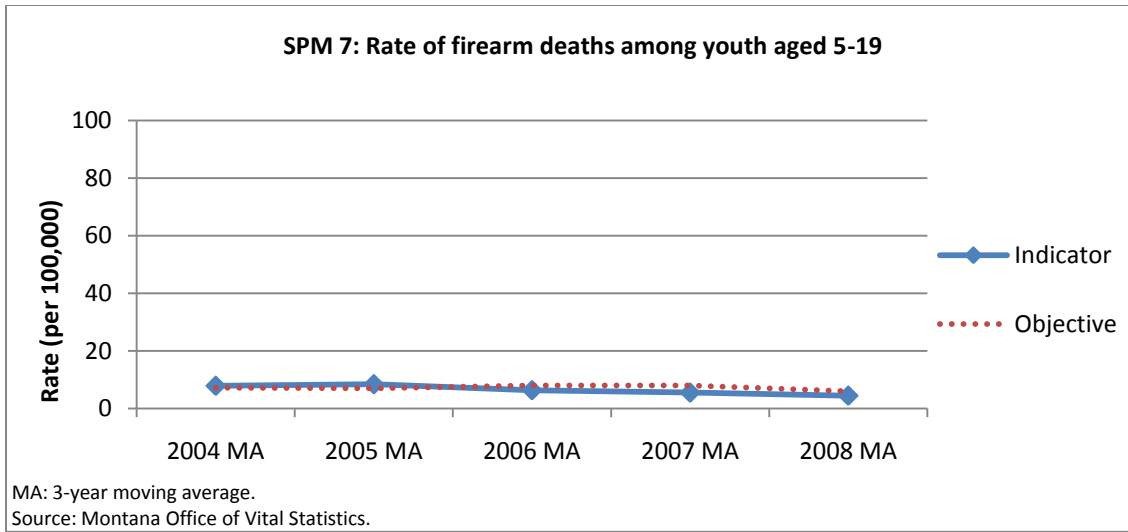


STATE PERFORMANCE MEASURES (2005-2010)



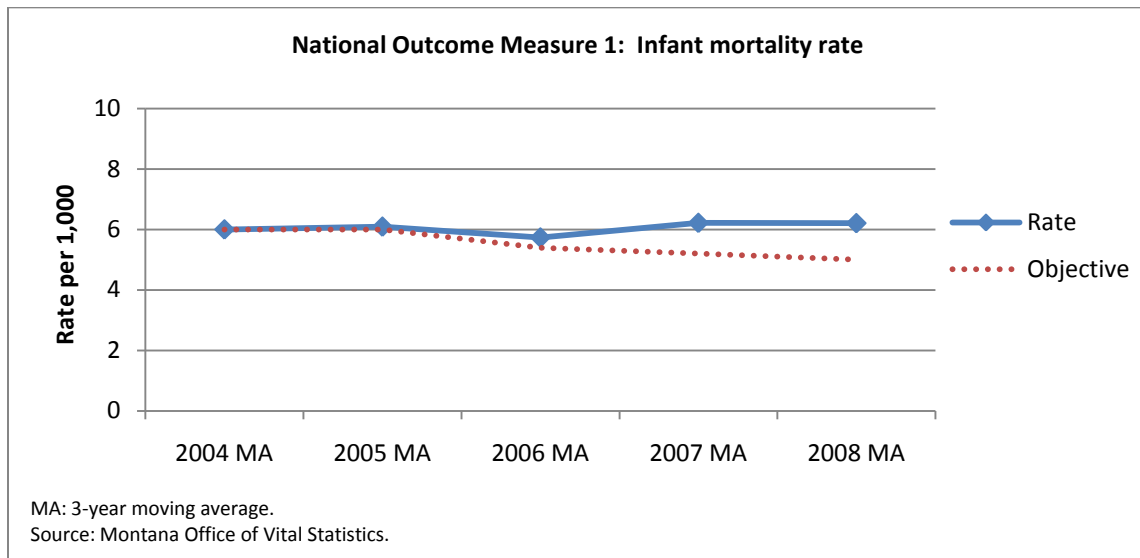
SPM 3: Made inactive; duplicated National Performance Measure.





SPM 9: Percent of Montana public middle and secondary schools that include comprehensive sexuality education as part of their health curriculum. *Data source for block grant reporting only included one year, so trend data are not shown.*

NATIONAL AND STATE OUTCOME MEASURES



National Outcome Measure 2: The ratio of the black infant mortality rate to the white infant mortality rate.

No data are reported for this outcome measure because the numbers are so small that a single year black infant mortality rate and the resulting indicator do not provide a useful representation of the ratio of the black infant mortality rate to the white infant mortality rate. There are fewer than 5 events for the numerator over the past year, and the average number of events over the last three years is fewer than 5. Therefore a three year moving average cannot be used.

